XR-7150/7151/7152

SERVICE MANUAL

US Model
Canadian Model
XR-7150

AEP Model
XR-7150/7151/7152

Photo: XR-7150

Model Name Using Similar Mechanism	XR-7200
Tape Transport Mechanism Type	MG-55A-31

SPECIFICATIONS

Audio Power Specifications

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
13 watts per channel minimum continuous average power into 4 ohms, both channels driven, from 20 to 20,000 Hz with no more than 1% total harmonic distortion.

Other Specifications

Power amplifier section

Outputs — Speaker outputs (sure seal connectors)
Speaker impedance — 4 – 8 ohms
Maximum power output — 25W + 25W (at 4 ohms)*
*Measured at 14.4V

Cassette player section

Tape track — 4-track 2-channel stereo
Frequency response — 30 – 18,000 Hz

Signal-to-noise ratio (A-weighted)

Cassette type	Dolby B	Dolby C	Dolby off
TYPE II, IV	66 dB	76 dB	58 dB
TYPE I	63 dB	73 dB	55 dB

Wow and flutter — 0.1% (WRMS)

Tuner section

FM

Tuning range — US, Canadian model: 87.9–107.9 MHz
AEP model: 87.5–108.0 MHz
Antenna terminal — External antenna connector
Intermediate frequency — 10.7 MHz
Usable sensitivity — 12 dBf (75 ohms)
Sensitivity at 50 dB quieting — 18 dBf (75 ohms)
Selectivity — 75 dB at 400 kHz
Signal-to-noise ratio — 65 dB (stereo), 70 dB (mono)
Harmonic distortion at 1 kHz — 0.5% (stereo), 0.3% (mono)
Separation — 30 dB at 1 kHz
Frequency response — 30 – 15,000 Hz
Capture ratio — 2.5 dB

AM (MW/LW)

Tuning range — **XR-7150**
US, Canadian model:
530–1,620 kHz
XR-7150/7152
AEP model:
531–1,602 kHz
XR-7151
LW: 153–281 kHz
MW: 531–1,602 kHz
Antenna terminal — External antenna connector
Intermediate frequency — 450 kHz

– Continued on page 2 –

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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FM/AM CASSETTE CAR STEREO
XR-7150/7152

FM/MW/LW CASSETTE CAR STEREO
XR-7151

SONY®

Sensitivity	XR-7150/7152: 35μV XR-7151: MW 35μV LW 70μV

General

Output lead	Line output lead Remote control output lead Amplifier remote control lead Power antenna relay control lead
Input lead	Line input lead Auxiliary line input lead Equalizer control input lead Remote control input lead
Tone controls	Bass ±10 dB at 100 Hz Treble ±10 dB at 10 kHz
Loudness	+10 dB at 100 Hz +6 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions (without bracket)	Approx. 178 × 50 × 165 mm (w/h/d) ($7^1/_8 \times 2 \times 6^3/_4$ inches) not incl. projecting parts and controls
Mounting dimensions (with bracket)	Approx. 182 × 53 × 145 mm (w/h/d) ($7^1/_4 \times 2^1/_8 \times 5^3/_4$ inches) not incl. projecting parts and controls
Weight	Approx. 1.9 kg (4 lb 3 oz)
Accessories supplied	Mounting hardware (1 set)

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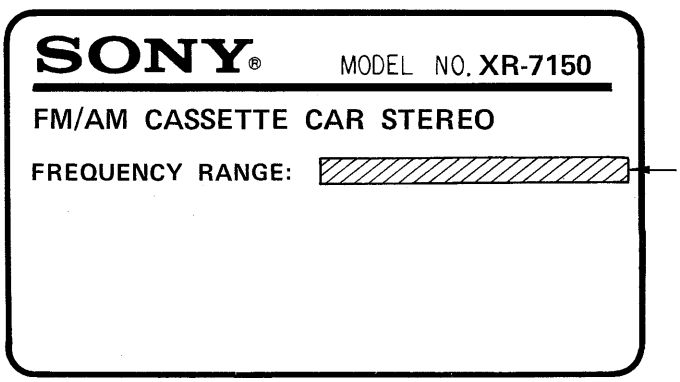
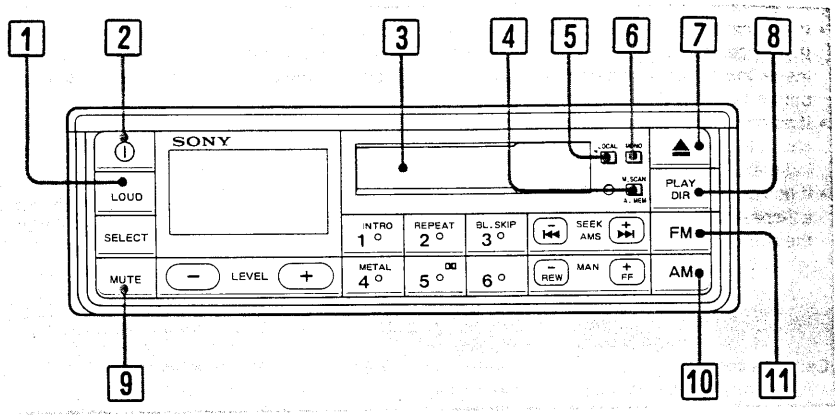
XR-7150 MODEL IDENTIFICATION

– Specification Label –



US, Canadian model: FM 87.9 – 107.9 MHz
AM 530 –1,620 kHz
AEP model: FM 87.5 – 108 MHz
AM 531 – 1,602 kHz

Location and Function of Controls



Refer to the page in ● for details.

1 **LOUD (loudness) button**
Press to reinforce bass and treble especially when listening at low volume. To disengage the button, press it again.

2 **⏻ (power on/off) switch**
Press to turn on and off the unit.

3 **Cassette insertion door**

4 **M. SCAN (memory scan)/A. MEM (automatic memory) button ❽**

5 **LOCAL button ❼**

6 **MONO (monaural) button ❼**

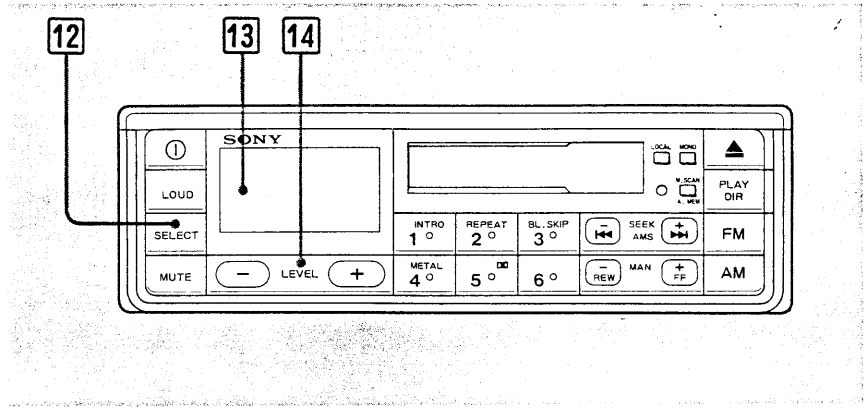
7 **⏏ (eject) button ❼**

8 **PLAY/DIR (tape playback/transport direction change) button ❼**

9 **MUTE button**
Press to momentarily mute the sound. Press again to restore the same sound level as before.

10 **XR-7150: AM button**
XR-7151: MW/LW button
XR-7152: SDK button

11 **XR-7150/7151: FM button**
XR-7152: FM/AM button



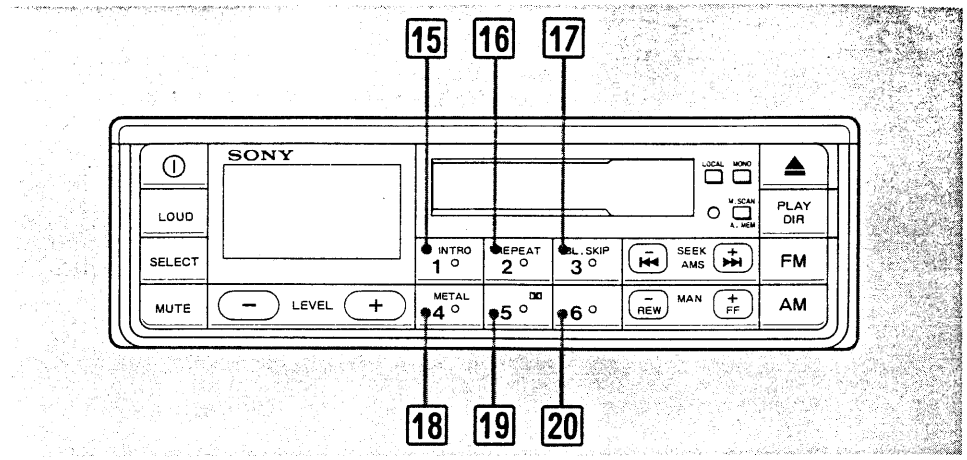
12 **SELECT (control mode select) button**
Press to select the desired mode, BAS (bass), TRE (treble), BAL (balance), FAD (fader), or VOL (volume).

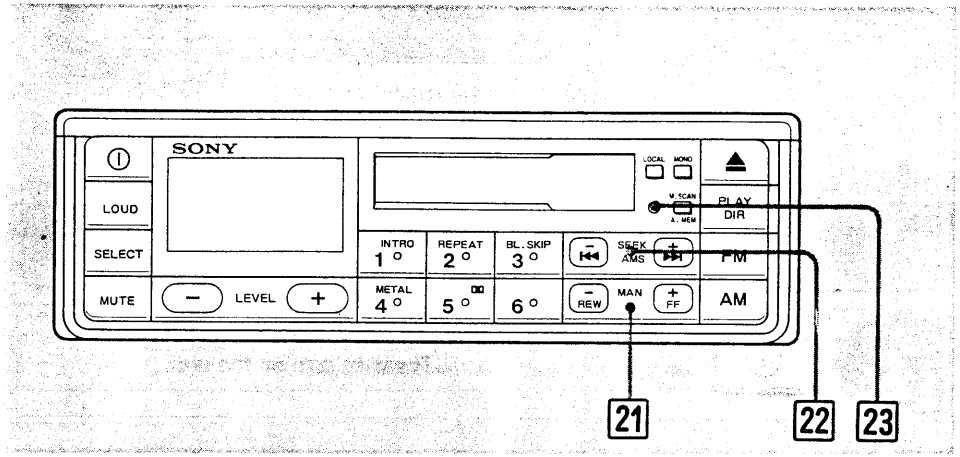
13 **Display window**

14 **LEVEL (volume/tone/balance control) button**
LEVEL button normally functions as the volume control. Adjust the level within three seconds after selecting the desired control mode. Otherwise, the mode goes back to the volume control mode.

Display window	Control mode	(−) LEVEL (+) LEVEL	
		Press (−)	Press (+)
BAS	Bass control	For less bass	For more bass
TRE	Treble control	For less treble	For more treble
BAL	Balance control	To decrease the right-speaker volume	To decrease the left-speaker volume
FAD	Fader control	To decrease the rear-speaker volume	To decrease the front-speaker volume
VOL	Volume control	For less volume	For more volume

Location and Function of Controls





	During tape playback	During radio reception
15	INTRO button ❼	Preset number buttons ❽
16	REPEAT button ❼	
17	BL. SKIP (blank skip) button ❼	
18	METAL button ❼	
19	□□ button ❼	
20	—	

	During tape playback	During radio reception
21	FF/REW (fast forward/rewind) button ❼	MAN (manual tuning) button ❽
22	AMS* button ❼	SEEK (automatic tuning) button ❼

23 Reset button
Press this button when no other button functions.

*Automatic Music Sensor

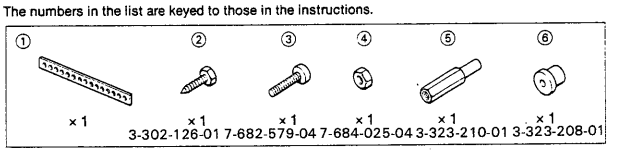
When you turn on the light switch of the car
The display becomes dimmer than before. If you want to keep it bright, press 4 while pressing SELECT. To make it dimmer again, press these buttons again.

To mute the beep sound
Press preset number 6 button while pressing SELECT. To obtain the beep sound again, press these buttons again.

Note: Intro play and repeat play will be cancelled when you press ⏻ button or when you keep the ignition key set to the off position.

Supplied Mounting Hardware

The numbers in the list are keyed to those in the instructions.

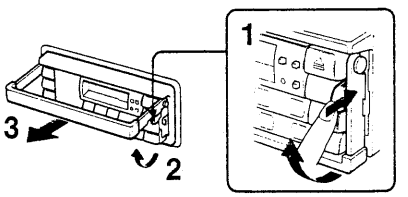


Installation

Precautions

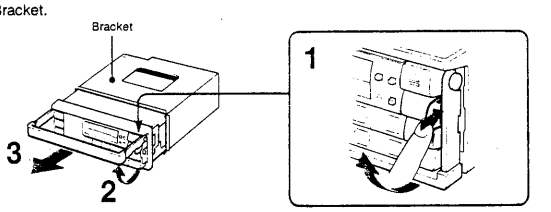
- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Avoid installing the unit where it should be subject to high temperatures, such as from direct sunlight or from hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.

To Remove the Unit

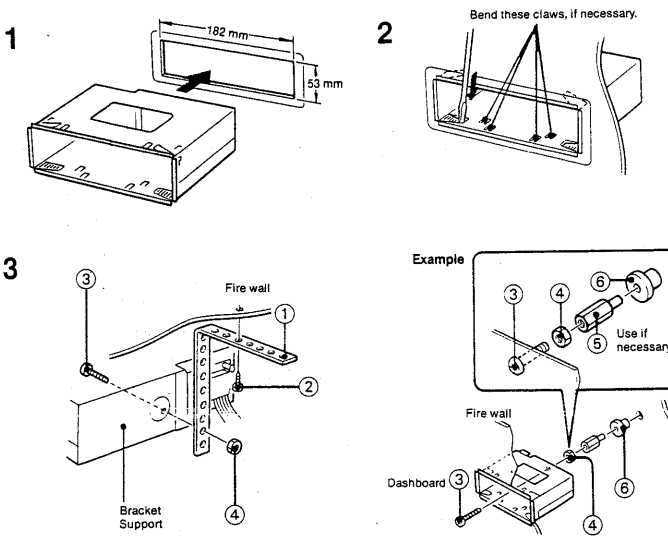


To prevent the unit from being stolen
When you leave your car, remove the unit from the bracket and take it away with you.

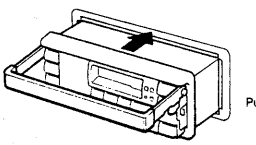
1 Remove the Unit from the Bracket.



2 Install the Bracket in the Dashboard.



3 Secure the Unit.



Push in the unit until it is locked firmly.

Connections

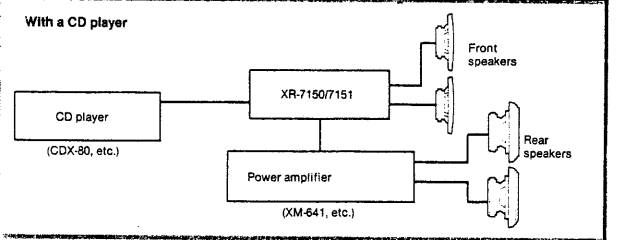
Caution

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the **red** power input lead only after all other leads are connected. And be sure to connect it to the positive 12 V power terminal. It will be energized when the ignition key is set to the accessory position.
- **Run all ground wires to a common ground point.**

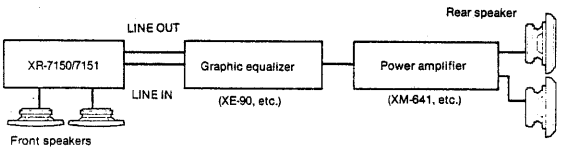
Connections

System Connection

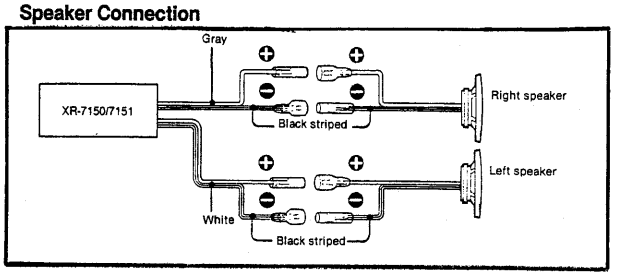
With a CD player



With a graphic equalizer



Speaker Connection

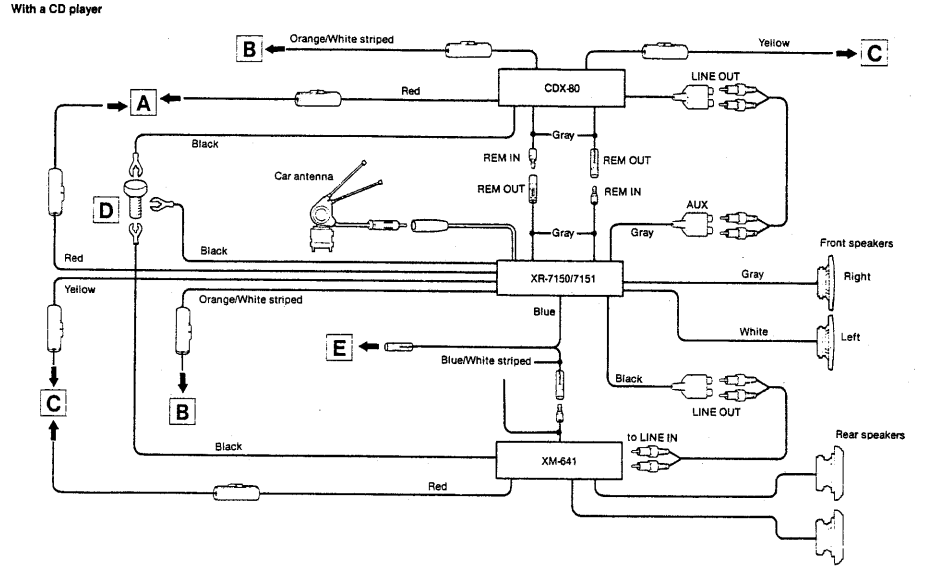


Notes on speaker connection

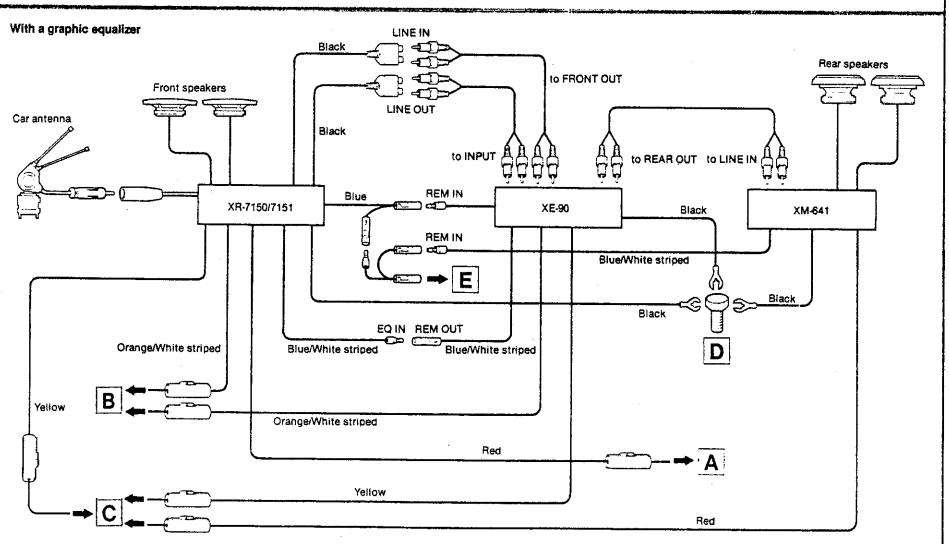
- Use speakers with an impedance of 3.2 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.
- Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.
- Do not attempt to connect the speakers in parallel.

Connection Diagram

With a CD player



With a graphic equalizer

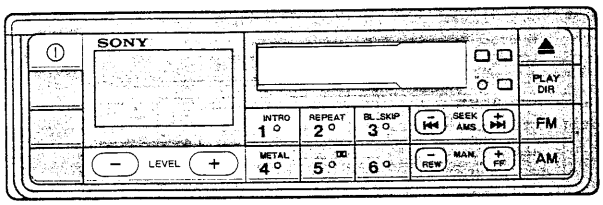


- **A** to the + 12 V power terminal which is energized in the accessory position of the ignition key
- **B** to the + 12 V lighting control lead
- **C** to the + 12 V power terminal which is energized at all times
- **D** to a metal part of the car
- **E** to power antenna relay control box

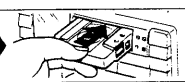
Note: A power antenna without relay box cannot be used with this unit. For details about the power antenna, refer to the power antenna instruction manual.

After completing the connections, press the reset button of this unit.

Tape Playback



1 ⏻ — Press to turn on the unit.

2  — Insert a cassette to start playback.

3 − LEVEL + — Press to adjust the volume.

Other Operations

To rewind or fast-forward the tape	REW MAN FF (rewind) (fast-forward)
To listen to the other side of the cassette	PLAY DIR
To stop the tape and take out the cassette	⏏

To stop the tape and listen to the radio	FM or AM MW/LW
To stop the tape and turn off the unit	⏻

Side of the cassette being played back
This unit plays back both sides of the cassette repeatedly. The indicator on the display window shows which side of the cassette is being played back.

Indicator	Side
▶	The side facing upward
◀	The side facing downward

Listening to the CrO_2 (TYPE II) or Metal (TYPE IV) Tapes

Press METAL 4 — METAL appears in the display window. To listen to the normal (TYPE I) tapes, press again to disengage the button.

Listening to Dolby NR-processed Tapes

Press 5 DOLBY NR — Press once to activate B-type Dolby NR system and twice for C-type Dolby NR system.
Select the same Dolby NR system used for the recorded cassette. Dolby NR (Noise Reduction) system reduces tape hiss noise in low-level, high-frequency signals.

Locating the Beginning of a Desired Selection during Playback (AMS Function)

To locate the beginning of the selection being played	Press ⏮
To locate the next selection	Press ⏭

Listening to the Beginnings of Selections in Order (Intro play)

Press INTRO 1 (during tape playback) — First ten seconds of each selection will be played back in order from the next selection. Press again to release it.

Repeating the Selection Being Played (Repeat play)

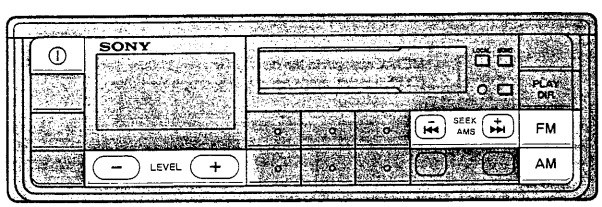
Press REPEAT 2 — The unit goes back to the beginning of the selection when the selection ends.

Skipping the Long Blank (Blank skip function)

Press BL.SKIP 3 — The unit skips the long blank (more than eight seconds) automatically and plays back the next selection. Press again to release this function.

To listen to the auxiliary source connected to the AUX INPUT connector of this unit
Play the auxiliary source.
The tape will stop automatically.

Automatic Tuning



1 ⏻ — Press to turn on the unit.

2 FM or AM MW/LW — Press to select the desired band.

3 SEEK AMS — Press to start scanning.
⏮ For lower frequencies
⏭ For higher frequencies
The scanning automatically stops when a station is tuned in.
Repeat this step until the desired station is tuned in.

4 − LEVEL + — Press to adjust the volume.

Other Operations

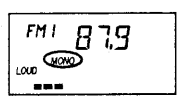
To stop the radio and start tape playback

When no cassette is inserted	
When a cassette is inserted	PLAY DIR

To stop the radio and turn off the unit	⏻

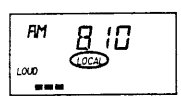
When the FM stereo program is too weak and noisy

Press MONO — The noise will be reduced. The sound will be monaural instead.

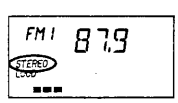


When there are too many stations and the scanning stops too frequently during automatic tuning

Press LOCAL — Only the stations with comparatively strong signals can be tuned in.



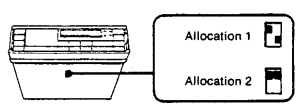
When an FM stereo program of sufficient signal strength is tuned in
The program is automatically received in stereo.



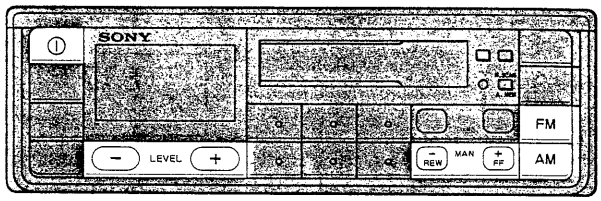
On LW frequency allocation (for the XR-7151 only)
For the automatic tuning, it is possible to change the LW tuning range according to the LW frequency allocation plan of the period in which this car stereo is used.

Period	LW frequency allocation
1988 to 1989	Allocation 1: 153, 162, 171, 180, 189, 198, 207, 216, 225, 234, 245, 254, 263, 272 and 281 kHz
1990 and later	Allocation 2: 153, 162, 171, 180, 189, 198, 207, 216, 225, 234, 243, 252, 261, 270 and 279 kHz

To change the LW frequency allocation
1 Remove the main unit from the bracket.
2 Set the LW frequency allocation selector located at the bottom of the unit to the proper position. Use a ball-point pen or a similar object.
3 Install the main unit to the bracket.
4 Press the reset button.



Manual Tuning



1 ⏻ — Press to turn on the unit.

2 FM or AM MW/LW — Press to select the desired band.

3 REW MAN FF — Press to select the desired station.

- REW — For lower frequencies
- FF — For higher frequencies

To change the frequency rapidly
Keep the button pressed.

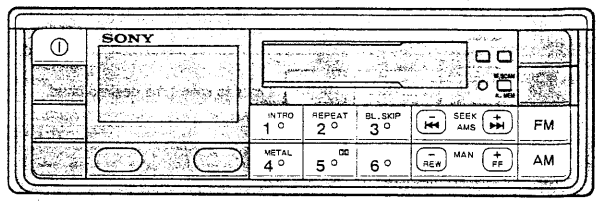
4 − LEVEL + — Press to adjust the volume.

Warning
While driving, keep your eyes on the road and use the automatic tuning or the memory preset tuning!

Memory Preset Tuning

You can memorize a total of 24 stations (6 stations for each band), one on each preset number.

Memorizing the Stations Automatically (Automatic Memory Function)



1 ⏻ — Press to turn on the unit.

2 FM or AM MW/LW — Press to select the desired band.

3 M.SCAN / A.MEM — Press for more than two seconds.

The unit starts scanning the selected band and memorizes the tuned stations on the preset number buttons 1 through 6 automatically in order of frequency.

Surveying What is Being Broadcast on the Preset Stations

Press lightly M.SCAN / A.MEM

Each memorized station will be scanned for five seconds in order. (When the broadcast of the memorized station is too weak, it cannot be received.)

In what order are stations memorized?
The unit scans the band from the lowest frequency to the highest frequency twice. At the first cycle, the unit scans only the stations with considerably strong signals. At the next cycle, the minimum level of the signal strength that can be tuned will be lowered.

Memory Preset Tuning

Memorizing Only the Desired Stations Manually

Example: To memorize on the preset number 1

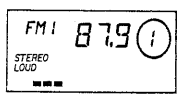
1 ⏻ — Press to turn on the unit.

2 FM or AM MW/LW — Press to select the desired band.

3 SEEK AMS or MAN — Press to tune in the desired station.

4 INTRO 1 — Press for more than two seconds.

The number of the pressed preset number button will be displayed. With the beep sound, the station will be memorized.



Repeat these steps for each station.

To Receive the Preset Station

1 FM or AM MW/LW — Press to select the desired band.

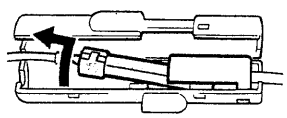
2 INTRO 1 ~ 6 — Press lightly to receive the desired station.

Important
Every preset number button has only one memory for a band. The previously memorized station will be erased when you enter a new station of the same band on the same preset number button.

Maintenance

Fuse Replacement

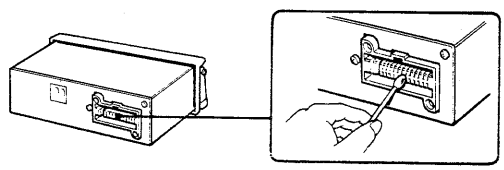
If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In this case, consult your nearest Sony dealer.



Warning
Use the specified ampere fuse for each lead. Use of a higher amperage fuse may cause serious damage.

Cleaning the Connector

To keep the best possible sound quality, clean the metallic part of the connector at the rear of the unit periodically using a commercially available head cleaning fluid or rubbing alcohol and a cotton swab.



Cleaning the Head and the Tape Path

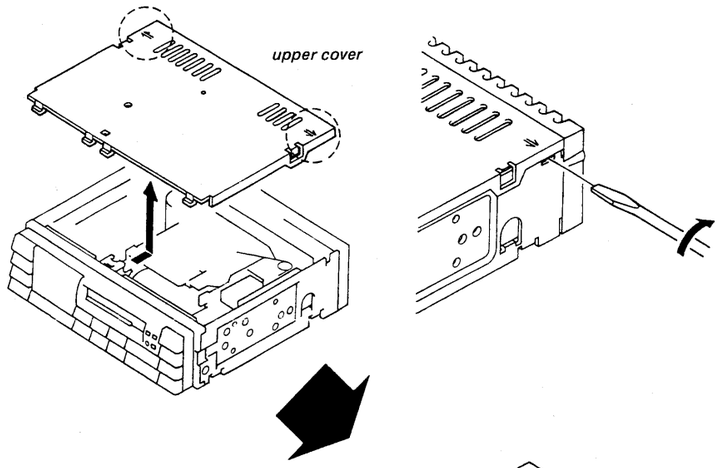
Prolonged use may contaminate the tape head and the tape path. Contamination causes sound drop-outs in playback.

Clean the tape head and the tape path every two weeks to enjoy optimum hi-fi stereo sound. Use a commercially available cleaning cassette.

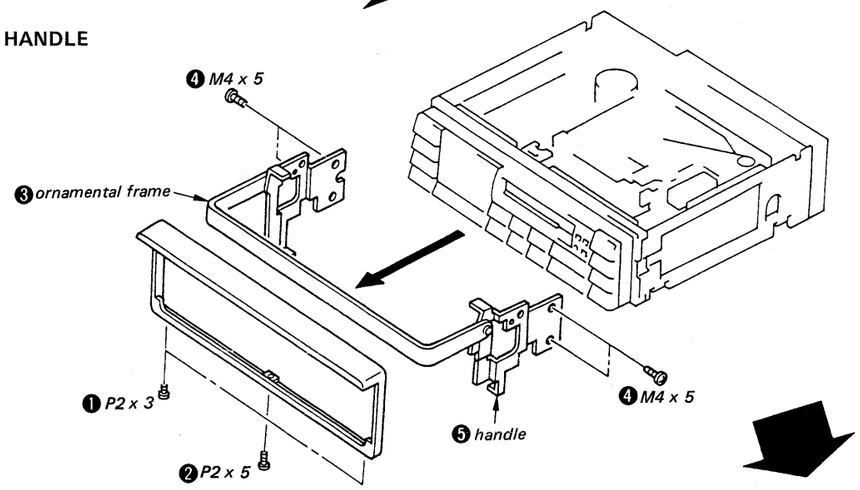
SECTION 2
DISASSEMBLY

UPPER COVER

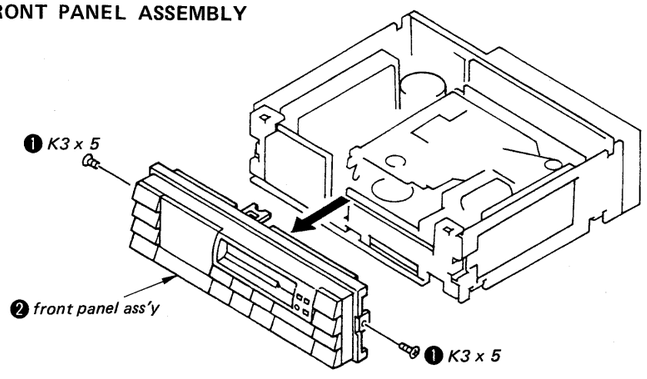
Remove the upper cover by inserting such as screw drivers in two portions as following figure. (Similarly the lower cover.)



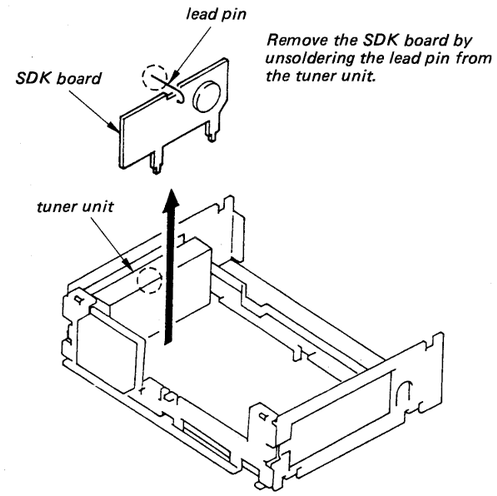
HANDLE



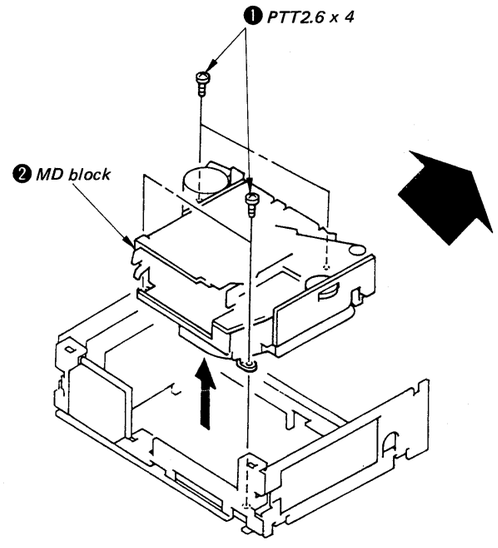
FRONT PANEL ASSEMBLY



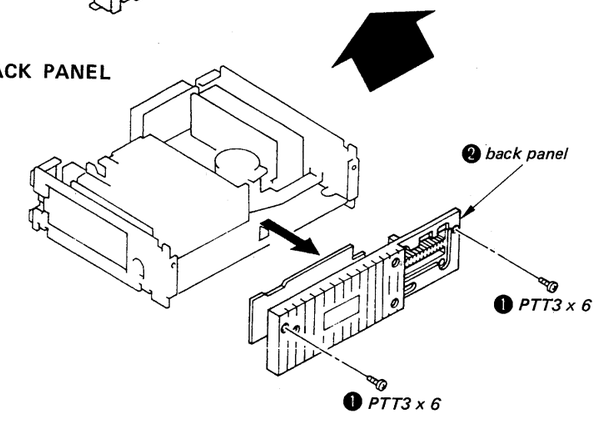
SDK BOARD



MD BLOCK



BACK PANEL



SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENT

PRECAUTION

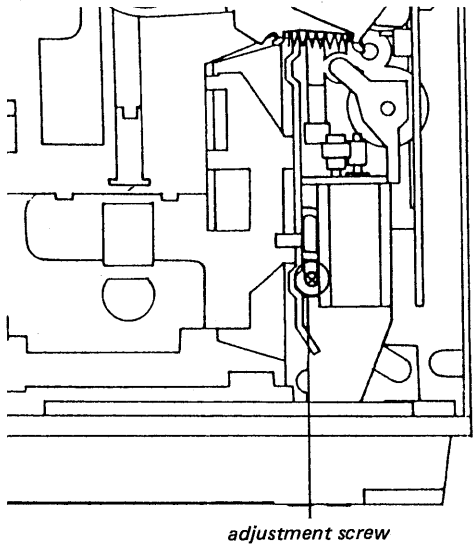
1. Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment:
   PB head — Pinch roller
   Idler — Rubber belt
   Capstan
2. Demagnetize the PB head using a head demagnetizer.
3. Be careful not to use a magnetized screwdriver.
4. After adjustment is completed, lock the adjustment parts using screws.
5. Unless otherwise specified, make adjustments at the specified voltage (14.4 V).

Torque Measurement

Measure the torque at a supply voltage of 14.4 V DC.

	Torque meter	Meter reading
FWD	CQ-102C	25 to 55 g·cm (0.35 to 0.77 oz·inch)
FF, REW	CQ-210B	55 to 150 g·cm (0.77 to 2.1 oz·inch)
Back tension	CQ-102C	1.5 to 4 g·cm or less (0.02 to 0.05 oz·inch or less)

Adjustment Location:

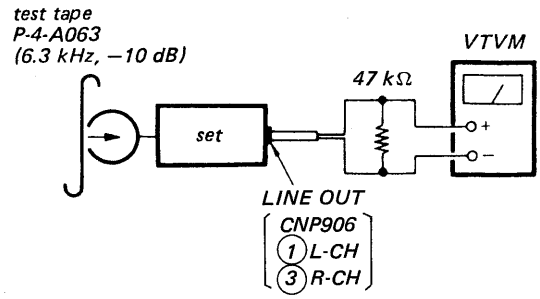


3-2. ELECTRICAL ADJUSTMENTS DECK SECTION

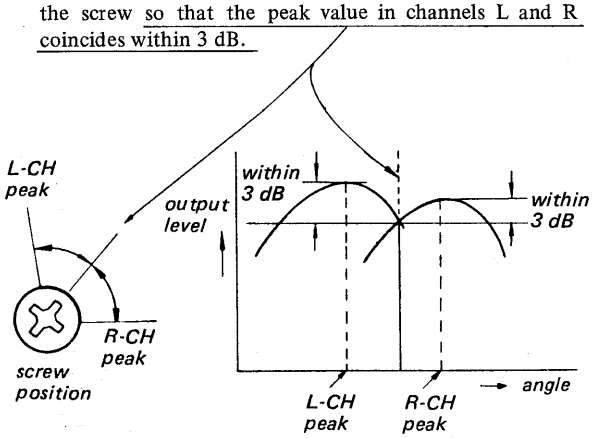
PB Head Vertical Adjustment

Proceudre:

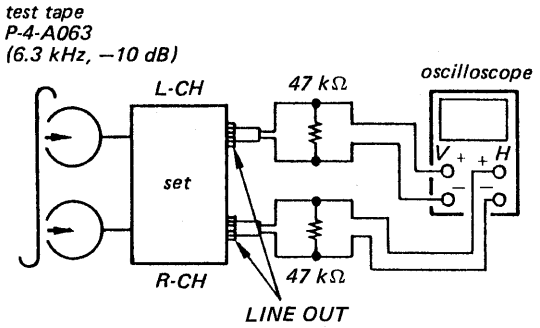
1. Put the set into the FWD PB mode.



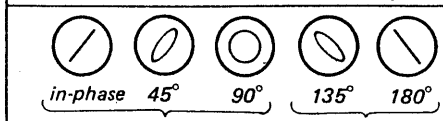
2. Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 3 dB.



3. Check the phase in the PB mode.



Lissajous's waveform on oscilloscope

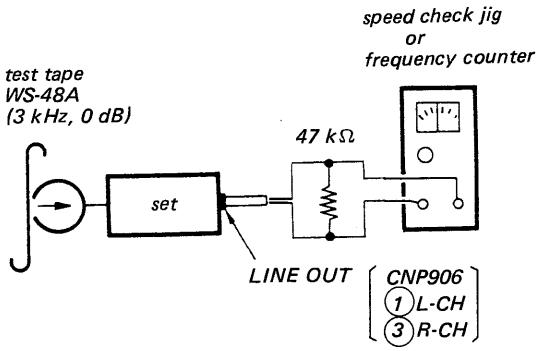


4. Repeat the above adjustment for the PB REV mode.

Capstan Motor Tape Speed Adjustment

Procedure:

1. Put the set into the FWD PB mode.

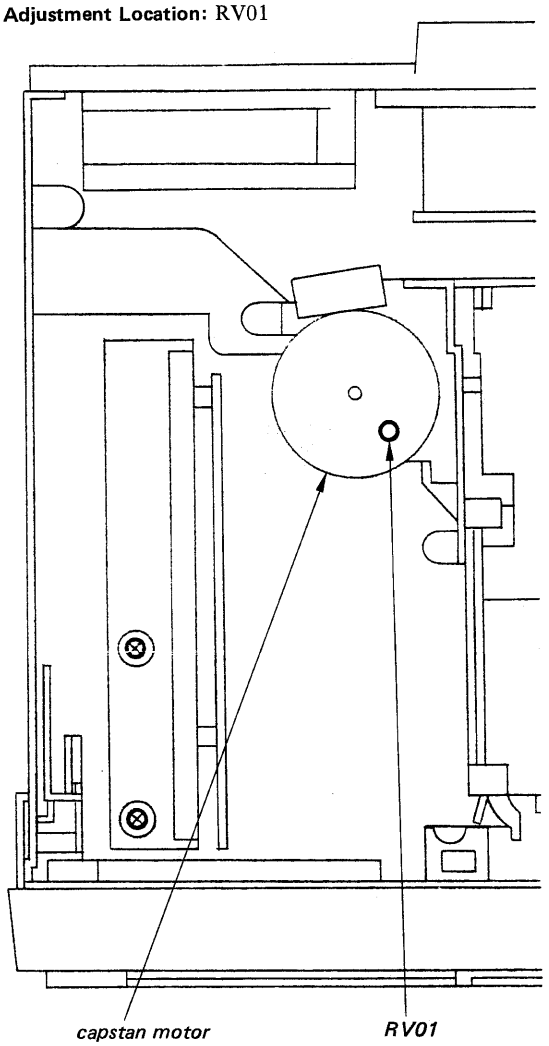


Specification: Constant speed

Speed check jig	Frequency counter
−1.5 to +2.5%	2,955 to 3,075 Hz

Adjust so that the frequency difference between the FWD and REV modes is within 1.5% (45 dB).

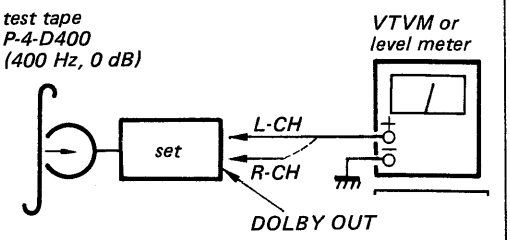
Adjustment Location: RV01



DOLBY NR Level Adjustment

Setting:

DOLBY NR switch: OFF
METAL switch: OFF

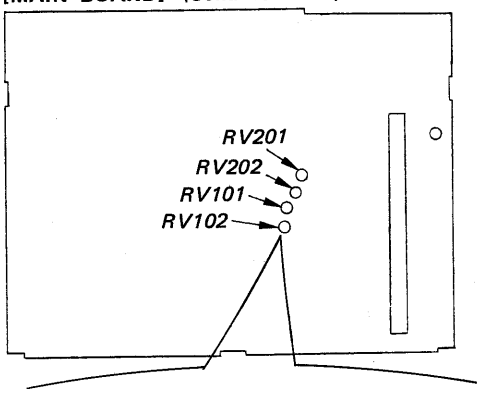


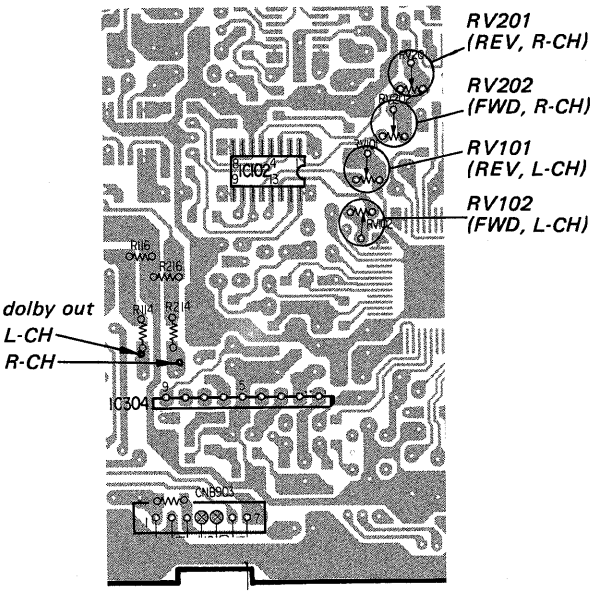
Procedure:

1. Put the set into the FWD PB mode.
2. Adjust RV102 (L-CH) and RV202 (R-CH) so that VTVM reading is −4 ±0.3 dB.
3. Put the set into the REV PB mode.
4. Adjust RV101 (L-CH) and RV201 (R-CH) so that VTVM reading is −4 ±0.3 dB.
   (−4 ±0.3 dB: approx. 0.51 to 0.47 V)

Adjustment Location: dolby board

[MAIN BOARD] (Conductor Side)





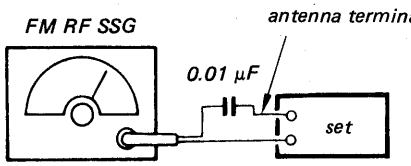
TUNER SECTION

Cautions during repair
When the front end is defective, replace it by a new one because its internal block is difficult to repair.

FM Auto Scan/Stop Level Adjustment

Setting:

Band switch: FM
MONO switch: ON
Frequency: 98.0 MHz (AEP, West Germany model)
98.1 MHz (US, Canadian model)



Carrier frequency: *98.0 MHz (AEP, West Germany model) 98.1 MHz (US, Canadian model)*
Output level: *60 dB (1 mV) 28 dB (25 V)*
Mode: *mono, unmodulated*

Procedure:

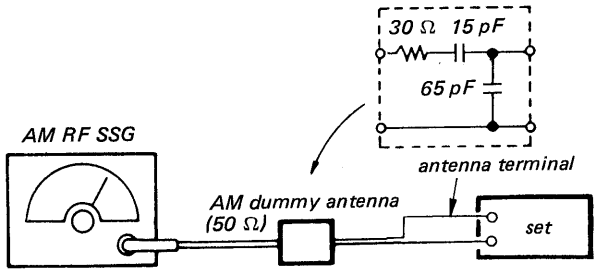
1. Tune in 98.0 MHz (AEP, West Germany model) or 98.1 MHz (US, Canadian model).
2. Adjust RV02 so that the VOM reading changes from low to high (5 V reference voltage).
3. When the FM RF SSG's output level is 28 ±4 dB check that the auto scan is stopped.

AM Auto Scan/Stop Level Adjustment

Note: This adjustment should be made after FM auto scan stop level adjustment is completed.

Setting:

Band switch: AM
Frequency: 999 kHz (AEP, West Germany model)
1,000 kHz (US, Canadian model)

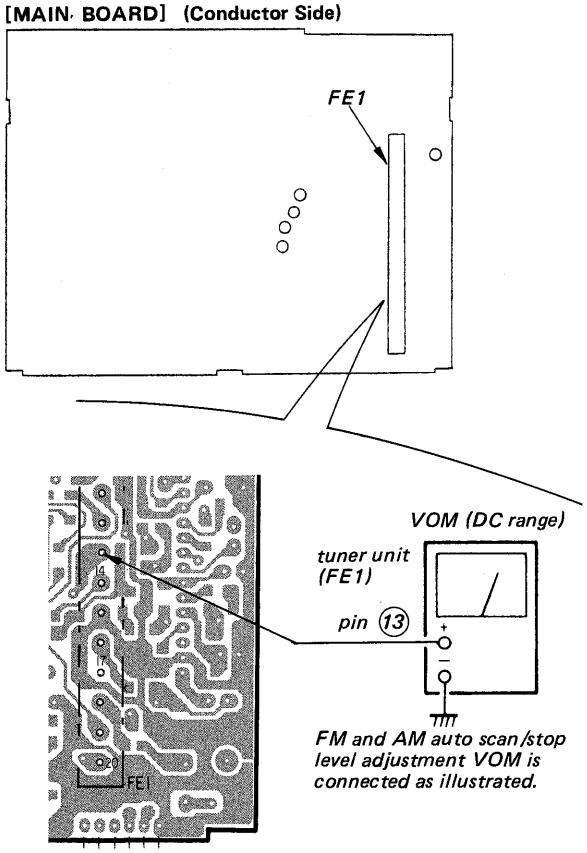


999 kHz, 60 dB (1 mV),
33 dB (44.7 µV)
no modulation

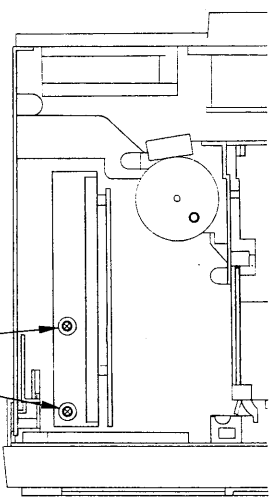
Proceudre:

1. Tune in 999 kHz (AEP, West Germany model) or 1,000 kHz (US, Canadian model).
2. Adjust RV03 so that the VOM reading changes from low to high (5.6 V reference voltage).
3. When the AM RF SG's output level is 35 ±5 dB, check that the auto scan is stopped.

[MAIN BOARD] (Conductor Side)



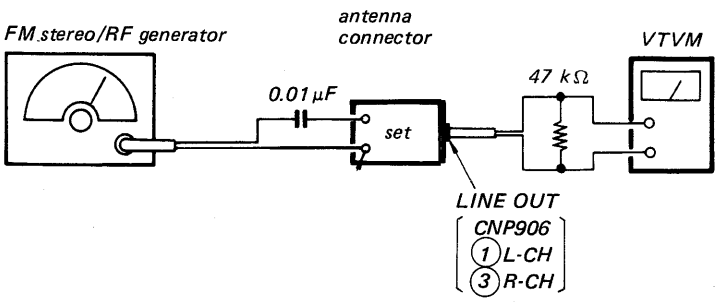
FM and AM auto scan/stop level adjustment VOM is connected as illustrated.



FM Stereo Separation Adjustment

Setting:

Band switch: FM
Frequency: 97.9 MHz



Carrier frequency: 97.9 MHz
Output level: 60 dB (1 mV)
Modulation: main; 1 kHz 33.75 kHz deviation
sub; 1 kHz, 33.75 kHz deviation
19 kHz pilot; 7.5 kHz deviation

Procedure:

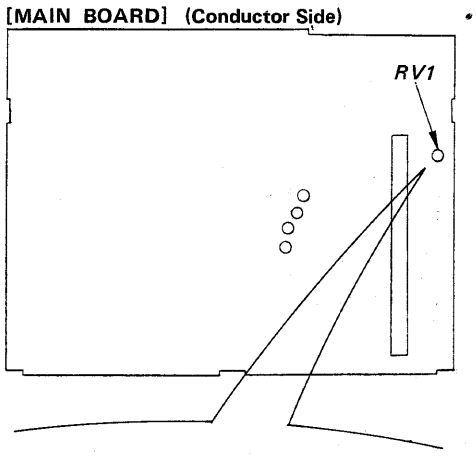
1. Adjust RV1 for a best stereo separation at a LINE OUT level of approximately 0 dB.
   More than 35 dB is good.

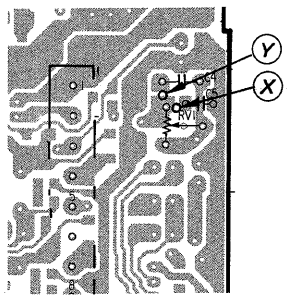
FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	(A)
R-CH	L-CH	(B) Adjust RV1 for minimum reading.
R-CH	R-CH	(C)
L-CH	R-CH	(D) Adjust RV1 for minimum reading.

   L-CH Stereo separation: (A) – (B)
   R-CH Stereo separation: (C) – (D)
   The separations of both channels shoul be equal.
2. If the result is not enough, make a solder bridge at (X) position and step back to proceduer 1.
3. If the result is still not good even with the bridge (X), make one at (Y) position in place of (X) and step to procedure 1. again.

Adjustment Location:

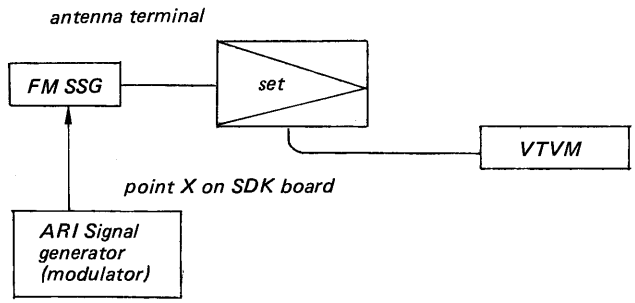
[MAIN BOARD] (Conductor Side)





ARI Level Adjustment

Setting:
Band switch: FM

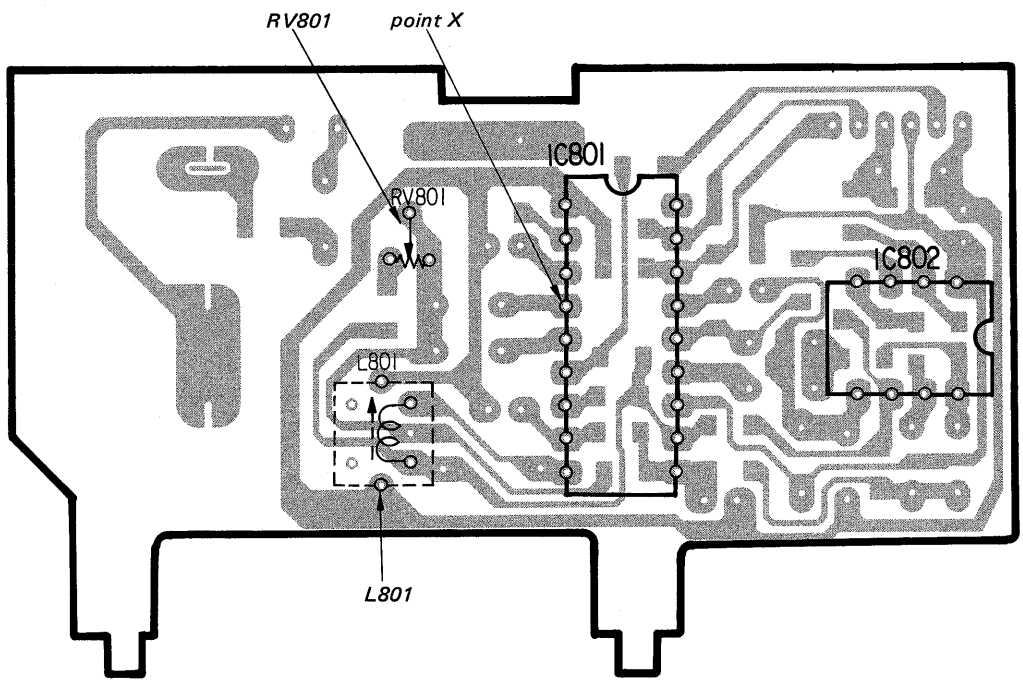


Frequency: Initial frequency
Modulation: ARI carrier only
Output level: 4 mVrms (composit)

Procedure:
1. Adjust L801 so that the level of 125 Hz signal becomes maximum.
2. Adjust RV801 in the same way.

Specification: 1 Vrms or more

Adjustment Location: SDK board conductor side view



SECTION 4
DIAGRAMS

【IC301 (μPD75108G-642)】

The μPD75108G-642 functions are described below.

- Description

Pin No.	Name	I/O	Description
1	CLOCK	O	Clock output for data transfer related to display (LCD), PLL, and electronic volume control. CMOS output, active high.
2	DATA	O	Data on the display (LCD), PLL, and electronic volume control are output from this terminal. CMOS output, active high.
3	PLL	O	Output terminal for PLL data selection. When this terminal is high, the data is used for PLL setting. The data is set to PLL at the trailing edge (⌐↓_). CMOS output, active high.
4	VOL	O	Output terminal for electronic volume control data selection. When this terminal is high, the data is used for electronic volume control setting. The data is set to the electronic volume control at the trailing edge (⌐↓_). CMOS output, active high.
5	RADIO	O	Output terminal for controlling the power source of the tuner block. The RADIO output goes high during tuner mode and when SDK is on. CMOS output, active high.
6	LW	O	Output terminal for LW/MW switching. The LW output goes high when the LW band is selected, and remains low when any other bands are selected. CMOS output, active high.
7	$\overline{\text{RESET}}$	—	The microcomputer hardware is reset by this terminal. It should be pulled up (by VCC) at all times including backup (using lithium battery). The microcomputer hardware is reset when this terminal is set from low to high. It reset is executed during backup operation, operation is not normal. Reset should be executed with the backup line connected. (The reset button on the panel will not work unless the backup line is connected.)
8	×2	—	×2 and ×1 are connected to the osillator to provide the clock for this microcomputer. The oscillation is realized by cellalock of 4.19 MHz which is operated whis an instruction cycle of 0.97 usec. Oscillation is maintained during battery backup.
9	×1	—	
10	MONO/ST	I/O	Forced monaural output terminal and stereo input terminal. The terminal functions as the STEREO input terminal when MONO is off (AUTO stereo mode). When the terminal is made low, the stereo pilot lamp goes on. The terminal functions as the MONO output terminal when MONO is on (forced monaural) and the output is made low. Note : The STK3400 is set to forced monaural if no current is fed to the stereo indicator terminal. Current is fed by the microcomputer to set MONO. CMOS output or CMOS input, low active.
11	ACC IN	I	Input terminal for ACC voltage detection. The terminal is used to determine whether the ACC is on or off. When this input is made low, the ACC off processing is executed (tape stop mute output).
12	EQ IN	I	A connected graphic equalizer is detected by the EQ IN terminal. When this terminal is made high, the fader control is centered and fader control selection by the select key is disabled.

<table>
<tr><th>Pin No.</th><th>Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>13</td><td>METAL</td><td>O</td><td>Metal output and AUTO metal input terminal.
After reset is complete, Metal display is turned on if this input is high in input mode. Metal is not displayed if this input is low.
When the Metal button is pressed, metal output is set in, high signal is output from this terminal, and Metal is displayed.
The mode is reset to Input mode when the Metal button is pressed again.</td></tr>
<tr><td>14
15
16
17</td><td>MS3
MS2
MS1
MS0</td><td>—</td><td>Pins ⑭ to ⑰ are input terminals for directional mode setting.
<table>
<tr><th></th><th>MSO</th><th>MS1</th><th>MS2</th><th>MS3</th><th>FM</th><th>AM (MW)</th><th>LW</th><th>Others</th></tr>
<tr><td>XR-7150 (US) (Canadian)</td><td>0</td><td>0</td><td>0</td><td>1</td><td>87.9 to 107.9MHz (200kHz)</td><td>530 to 1620kHz (10kHz)</td><td></td><td></td></tr>
<tr><td>XR-7150 (AEP)</td><td>0</td><td>1</td><td>0</td><td>1</td><td rowspan="3">87.5 to 108MHz (50kHz)</td><td rowspan="3">531 to 1602kHz (9kHz)</td><td></td><td></td></tr>
<tr><td rowspan="2">XR-7151</td><td>0</td><td>1</td><td>1</td><td>1</td><td>155 to 281 kHz</td><td>9n, 9n+2 (n=10 (max))</td></tr>
<tr><td>1</td><td>1</td><td>1</td><td>1</td><td>155 to 279 kHz</td><td></td></tr>
<tr><td>XR-7152</td><td>0</td><td>0</td><td>1</td><td>1</td><td></td><td></td><td></td><td>SDK mode *1</td></tr>
<tr><td>TEST</td><td>0</td><td>0</td><td>0</td><td>0</td><td>76.0 TO 90.0MHz (100kHz)</td><td>522 to 1629kHz (9kHz)</td><td></td><td>Test mode *2</td></tr>
</table>
Notes :
*1 When the SDK mode is selected, the button functions are modified as follows :
XR-7150 XR-7152
AM SDK
FM FM/AM
MONO MONO/LOCAL
LOCAL DSPL
*2 During the test mode, the power switch is held off and tape end is not detected.
Power function : Voltage is applied if the power source is on.</td></tr>
<tr><td>18
19</td><td>LM1
LM0</td><td>O</td><td>Loading motor control output port.
<table>
<tr><th>Motor rotation</th><th>LM0</th><th>LM1</th></tr>
<tr><td>Loading direction</td><td>High</td><td>Low</td></tr>
<tr><td>Eject direction</td><td>Low</td><td>High</td></tr>
<tr><td>FF and REW (including AMS) mode</td><td>High (Brake)</td><td>High (Brake)</td></tr>
</table></td></tr>
<tr><td>20</td><td>CPM</td><td>O</td><td>Output terminal for capstan motor control.
The signal is kept high during PLAY, FF, and REW (including AMS) modes.</td></tr>
<tr><td>21</td><td>DPL</td><td>O</td><td>Output terminal for plunger control.
The signal is kept high during PLAY, FF, and REW (including AMS) modes.
The signal output is kept off for about 60 msec during direction mode.</td></tr>
</table>

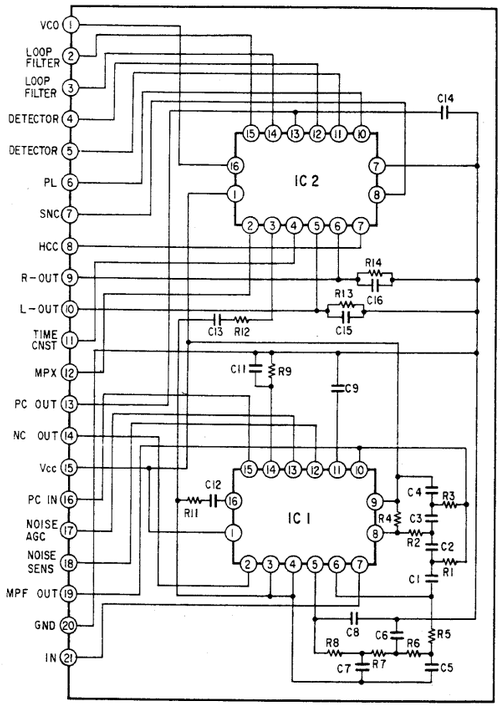
<table>
<tr><th>Pin No.</th><th>Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>22
23
24
25</td><td>PS1
PS2
PS3
PS4</td><td>I</td><td>Input terminals for detection of the MD (CMX-55) position.
<table>
<tr><td></td><td colspan="8">MD position</td></tr>
<tr><td>Switch port</td><td>EJECT</td><td>STOP</td><td></td><td>FF∗</td><td></td><td>REW∗</td><td></td><td>PLAY</td></tr>
<tr><td>PS1</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr>
<tr><td>PS2</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td></tr>
<tr><td>PS3</td><td>1</td><td>1</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td>PS4</td><td>0</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>0</td><td>0</td></tr>
</table>
Note : The FF position and REW position are interchanged when the direction is reversed (FF to REW and REW to FF). The STOP mode indicates the status immediately after "0011" is changed to "0111", because switch mode during EJECT (set from STOP) is identical to the STOP status.</td></tr>
<tr><td>26</td><td>VSS</td><td>—</td><td>Microcomputer power source (GND) terminal.</td></tr>
<tr><td>27</td><td>BACK UP</td><td>I</td><td>Input terminal for back up current detection.
When this terminal is made low, the microcomputer clock is terminated (stop mode) and memory is backed up at low voltage.
When the terminal is set from low to high at the leading edge, the clock is started (operation is enabled).</td></tr>
<tr><td>28</td><td>OFF IN</td><td>I</td><td>Terminal for Handle Up detection.
When this input is high, operation identical to power off is executed.
When this input is made low, the previous status is reset.</td></tr>
<tr><td>29</td><td>AMS</td><td>I</td><td>This input is used to detect tuning during tape playback and AMS.
No curve is contained if this terminal is high, and the terminal is made low if curve is detected.</td></tr>
<tr><td>30</td><td>N/R</td><td>I</td><td>Input terminal to detect tape running direction.
High : Normal direction
Low : Reversed direction
During tape playback, the MD is controlled to match this input with the microcomputer internal status.</td></tr>
<tr><td>31
32</td><td>END1
END2</td><td>I</td><td>END1 and END2 are used to detect reel table rotation for tape end detection and tuning detect timing during AMS mode. Both leading and trailing edges (_┌ and ┐_) are counted (16 counts for one reel table rotation).
END1 (REEL1) ··· Normal direction take up reel table
END2 (REEL2) ··· Reverse direction take up reel table</td></tr>
<tr><td>33</td><td>SK
(Signal identifying the traffic information broadcasting station)</td><td>I</td><td>SK input terminal in SDK directional mode.
High : SK present (SK is indicated.)
Low : SK absent (No indication.)
If this terminal is held low for more than 8 seconds while the SDK switch is on, SEEK is executed automatically from local mode.(This applies to FM band.)
When SDK is on, only the stations with this terminal in high mode are terminated (automatic station selecting).</td></tr>
<tr><td>34</td><td>SDL</td><td>I</td><td>This input is used to detect the level of Seek, Memory scan, and AUTO memory during tuner automatic station selection.
When this terminal is made high, "station preset" is assumed and the SDS is output to start the IF counter of the PLL IC.
This terminal is also checked during SDC check (PLL IC IF counter matched output). If it is high, the station selection operation is terminated.
(AUTO memory is switched to Memory and Memory scan is held temporarily.)</td></tr>
</table>

<table>
<tr><th>Pin No.</th><th>Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>35</td><td>DK
(Traffic information broadcasting signal)</td><td>I</td><td>If this input is made high while SDK is on, "traffic information start is assumed. Tape mode (AUX) is switched to tuner (FM) mode and the volume level is raised to the level specified in memory. The SDK indication continues blinking during this operation. The system is reset to the previous mode when this input is made low or SDK is turned off.</td></tr>
<tr><td>36</td><td>BK
(Area identification signal)</td><td>I</td><td>Signals between 23 Hz and 54 Hz are counted and the area code is indicated (while SDK is on) as follows :
A 23.75 Hz
B 28.27 Hz
C 34.93 Hz
D 39.58 Hz
E 45.67 Hz
F 53.98 Hz</td></tr>
<tr><td>37</td><td>DK OUT</td><td>O</td><td>This output is usually kept high but is made low when the traffic information receive mode is set by the DK input.
CMOS output.</td></tr>
<tr><td>38</td><td>ILM2</td><td>O</td><td>Illumination mode output 2 is used for switching the dimmer on and off in this system.
Press button No. 4 while pressing the SELECT button to change the switching status.
ILM2 is made low during reset.</td></tr>
<tr><td>39</td><td>ILM1</td><td>O</td><td>Illumination mode output 1 is reserved in this system.
<table>
<tr><th>Button operation</th><th>ILM1</th></tr>
<tr><td>If Select and No. 1 are pressed :</td><td>Low</td></tr>
<tr><td>If Select and No. 2 are pressed :</td><td>High</td></tr>
<tr><td>If Select and No. 3 are pressed :</td><td>Low in Tuner mode
High in Tape or AUX mode</td></tr>
</table></td></tr>
<tr><td>40</td><td>BEEP</td><td>O</td><td>Output terminal to control the button operation confimation sound.
The multivibrator is controlled by this output to generate key tone pulse of about 60 mesc.
This output is disabled by pressing button No. 6 while pressing the SELECT button.</td></tr>
<tr><td>41</td><td>K3</td><td>I</td><td rowspan="4">Key input terminal.
Usually pulled up at 5 V. Key input is assumed when the signals are made low by the KS port.</td></tr>
<tr><td>42</td><td>K2</td><td>I</td></tr>
<tr><td>43</td><td>K1</td><td>I</td></tr>
<tr><td>44</td><td>K0</td><td>I</td></tr>
<tr><td>45</td><td>KS5</td><td>O</td><td rowspan="6">Key scan output terminals of N channel open drain type (active low).</td></tr>
<tr><td>46</td><td>KS4</td><td>O</td></tr>
<tr><td>47</td><td>KS3</td><td>O</td></tr>
<tr><td>48</td><td>KS2</td><td>O</td></tr>
<tr><td>49</td><td>KS1</td><td>O</td></tr>
<tr><td>50</td><td>KS0</td><td>O</td></tr>
<tr><td>51</td><td>B/$\overline{C}$</td><td>O</td><td>Dolby B/C selector output terminal.
High when Dolby B is selected or Dolby is off.
Low when Dolby C is selected.
The output can be pulled up at 5 V or above (up to 10 V) because it is on N channel open drain type (active low).</td></tr>
<tr><td>52</td><td>$\overline{DOLBY}$</td><td>O</td><td>Dolby on/off selector output terminal.
Low when Dolby is on (B & C).
High when Dolby is off.
The output can be pulled up at 5 V or above (up to 10 V) because it on N channel open drain type (active low).</td></tr>
</table>

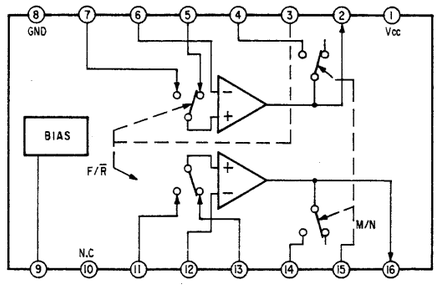
<table>
<tr><th>Pin No.</th><th>Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>53</td><td>S2</td><td>O</td><td rowspan="2">Signal selector output terminal.
Signals are selected as follows :
<table><tr><td colspan="2"></td><td>S1</td><td>S2</td></tr><tr><td rowspan="2">Tape</td><td>NOR</td><td>Low</td><td>Low</td></tr><tr><td>REV</td><td>High</td><td>Low</td></tr><tr><td colspan="2">Tuner</td><td>Low</td><td>High</td></tr><tr><td colspan="2">AUX</td><td>High</td><td>High</td></tr></table>The output can be pulled up at 5 V or above (up to 10 V) because it is on N channel open drain type (active low).</td></tr>
<tr><td>54</td><td>S1</td><td>O</td></tr>
<tr><td>55</td><td>FM/AM</td><td>O</td><td>Output terminal for FM/AM power sourece selection during Tuner mode.
Low ; FM
High ; AM
The current for the N channel open drain output is fed from the base of the transistor for power swicthing.</td></tr>
<tr><td>56</td><td>MUTE</td><td>O</td><td>Mute output terminal. The output is made high to apply muting during mode selection and AMS.
The signal is usually kept low and made high (high impedance) during nonoperating modes (N channel open drain type).</td></tr>
<tr><td>57</td><td>NC
(VPP)</td><td>—</td><td>Functions as VPP during one-time microcomputer mode and not connected (reserved) during mask mode.
For safety, NC is connected to the power source (VDD).</td></tr>
<tr><td>58</td><td>VDD</td><td>—</td><td>The microcomputer power source terminal, operating at 5 V ±0.5 V.</td></tr>
<tr><td>59</td><td>POWER</td><td>O</td><td>Power source control output terminal.
High level signal is output when power is turned on.
CMOS output.</td></tr>
<tr><td>60</td><td>OUT RUN</td><td>O</td><td>This output is used to stop the unit connected to the output terminal AUX for OUT RUN.
AUX High
Otherwise Low
CMOS output.</td></tr>
<tr><td>61</td><td>AUX IN</td><td>I</td><td>AUX mode input terminal.
When this input is made high, AUX input present is assumed and the system is set to AUX mode.</td></tr>
<tr><td>62</td><td>SDC</td><td>I</td><td>IF count matching output (PLL) input terminal.
If the IF frequency is matched, low is output from the PLL IC.
Low is always applied during AM mode in this system.
(Stop is executed only the by level difference.)</td></tr>
<tr><td>63</td><td>SDS</td><td>O</td><td>IF count start output terminal. When this terminal is made high, the IF count starts (PLL) and the SDC is made low if the IF frequency is matched.
If the SDL is made high during automatic station selection, this terminal is made high to start the IF counter. Ohterwise, the output is kept low.
CMOS output.</td></tr>
<tr><td>64</td><td>LCD</td><td>O</td><td>Output terminal for LCD data selection. When this terminal is high, the deta is used for LCD display. This output is connected to the LCD driver (Sanyo LC7582) CE terminal and used as the data latch signal.
CMOS output.</td></tr>
</table>

• IC BLOCK DIAGRAMS

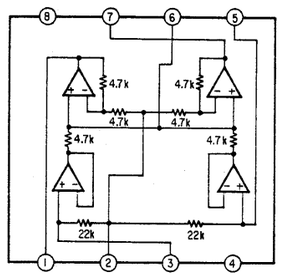
IC1 STK-3400



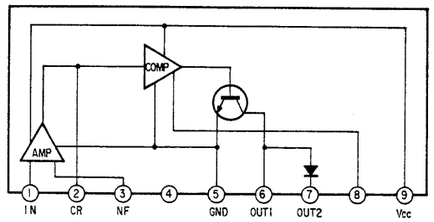
IC101 TA7705F



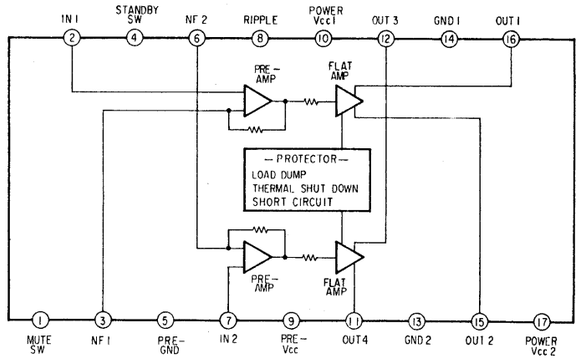
IC110, 112 M5280FP



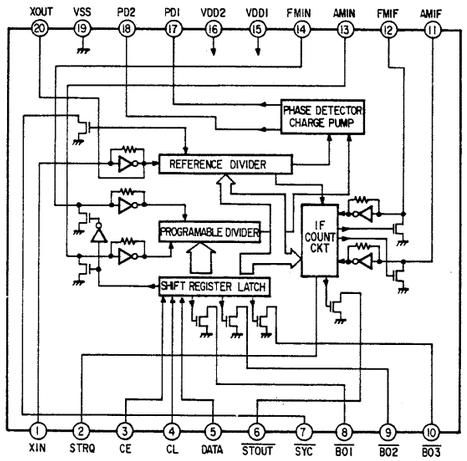
IC304 LA2000



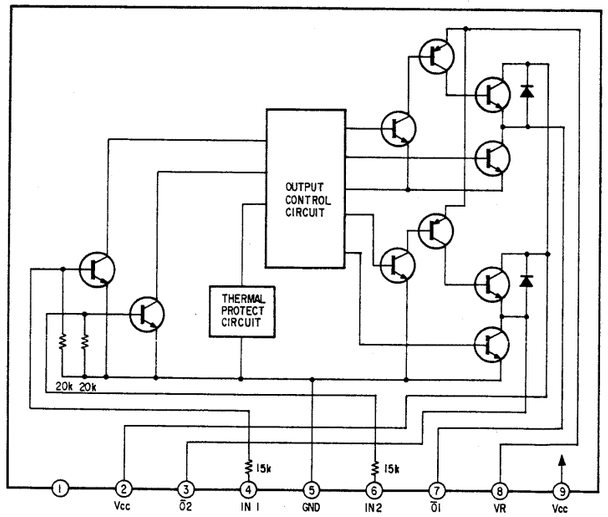
IC501 TA8210H



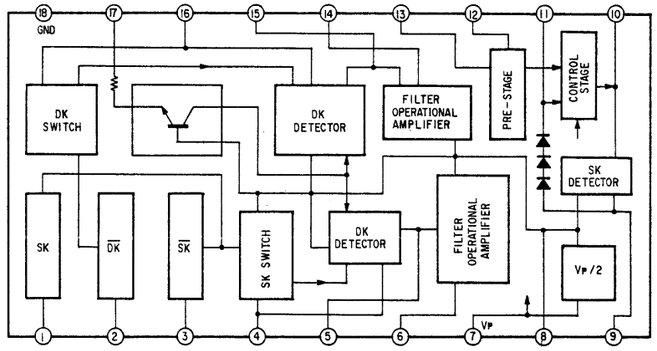
IC2 LM7000



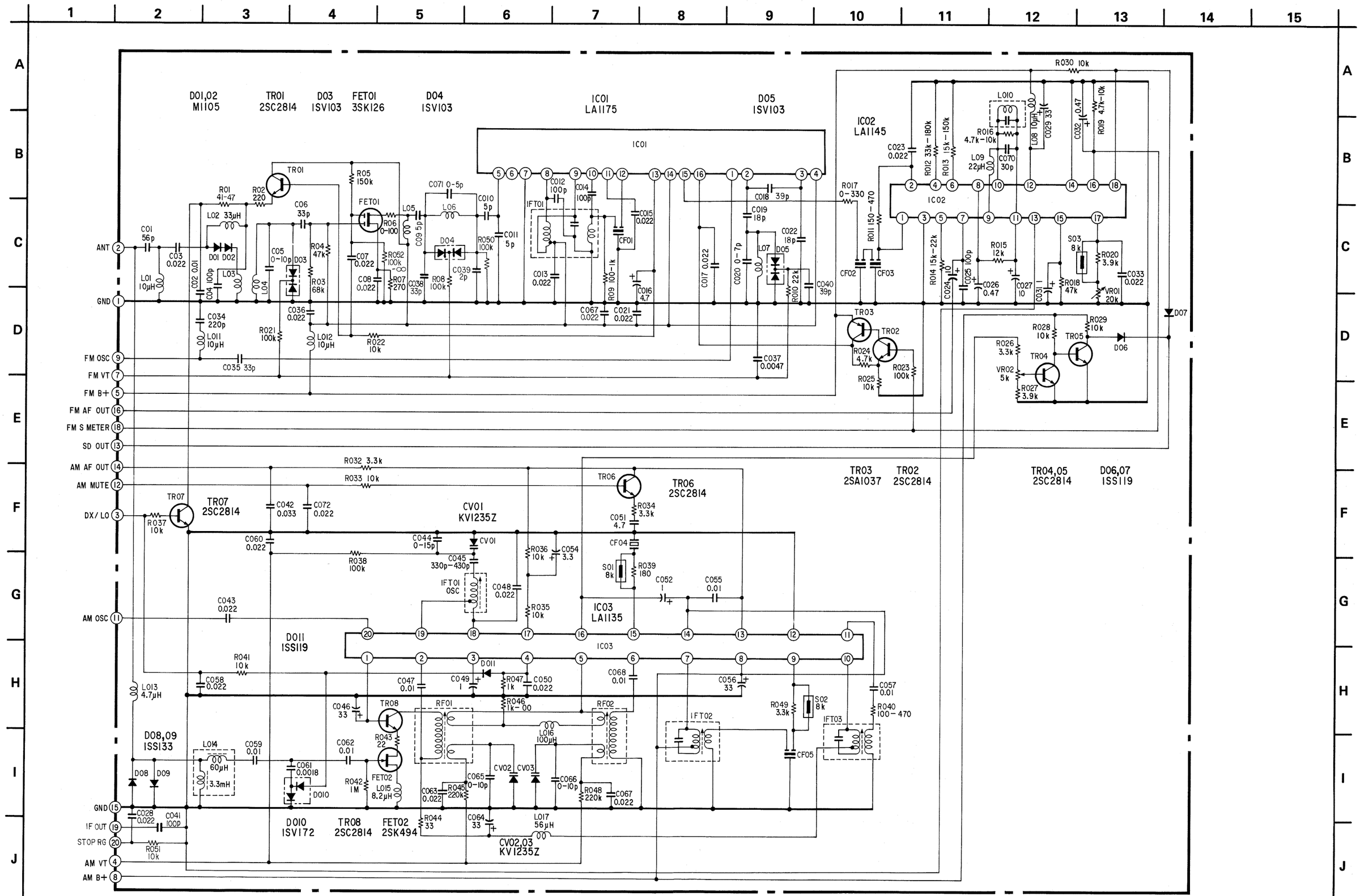
IC302 M54644BL



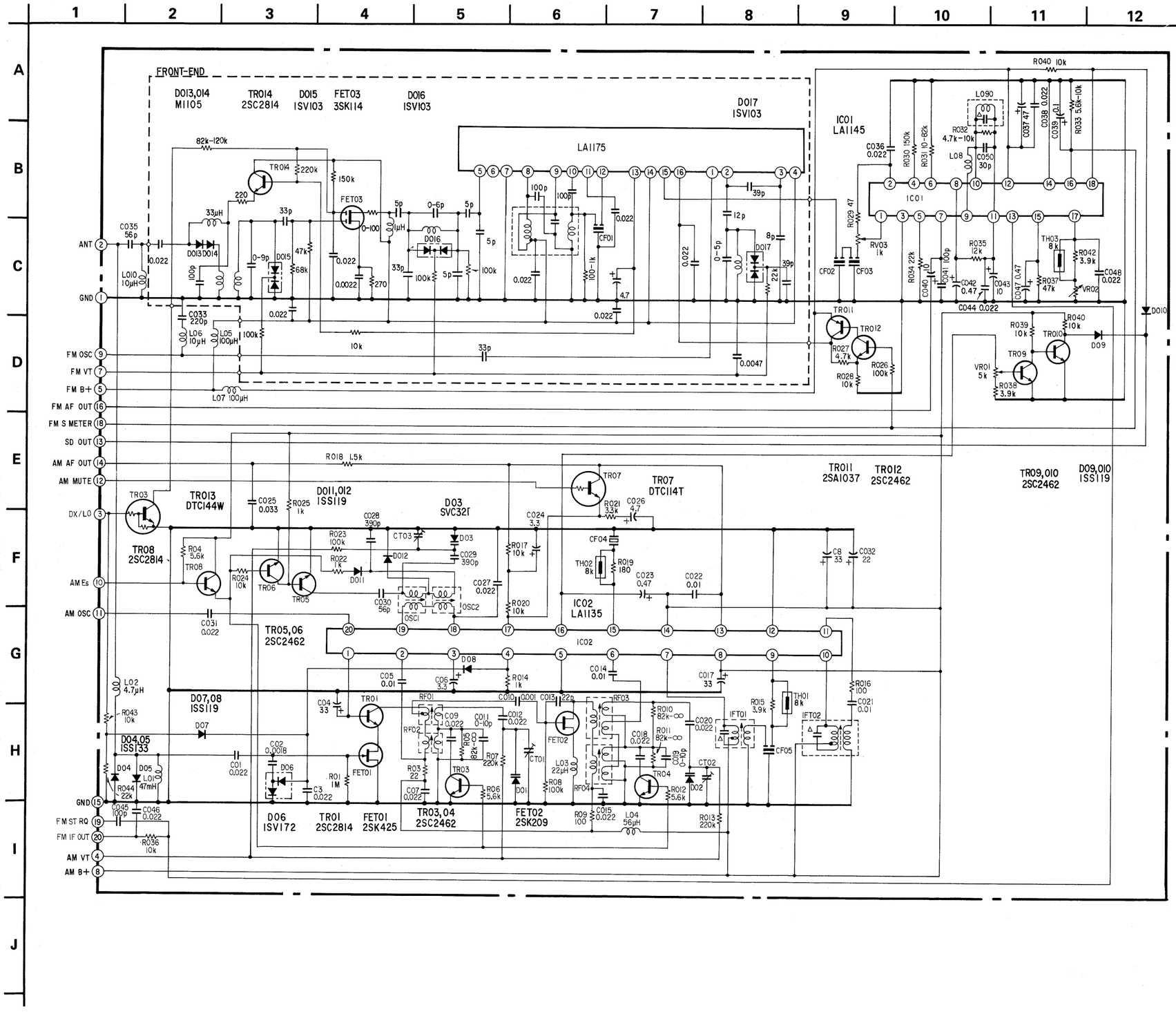
IC801 TDA1579



4-1. XR-7150/7152 TUNER SECTION SCHEMATIC DIAGRAM

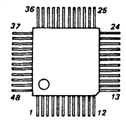


4-2. XR-7151 TUNER SECTION SCHEMATIC DIAGRAM



● Semiconductor Lead Layouts

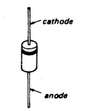
CXA1097Q



STK3400

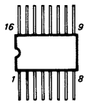
DTC314TK

RD6.2E-L2
RD9.1E-B2
10E2

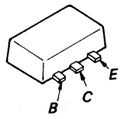


LA2000

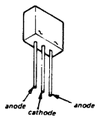
TA7705F
μPD4052BG



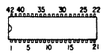
2SB1122-T
2SD1615



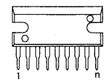
1S2838



LC7537AN

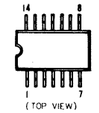


TA8210H



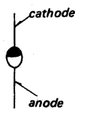
2SD1802

M5228FP
TC4081BF
μPD4066BG

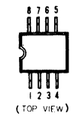


μPC4558C

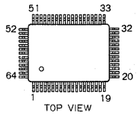
DSA3A4



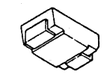
M5280FP
μPC4560G2



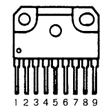
μPD75108G-642-1B



LN1451C

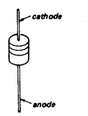


M54644BL



DTA114EK
DTC114EK
DTC144EK
2SC1623

RD10ES-B
RD11ES-B
RD3.9ES-B
RD4.3ES-B1
RD4.7ES-B
RD5.6ES-B2
1SS133



4-3. MAIN SECTION PRINTED WIRING BOARDS

- **See page 27 for Semiconductor Lead Layouts.**
- Color code or sleeving over the end of the jacket.

- ○—— : parts extracted from the component side.
- ⊗ : Through hole.
- ▒▒ : Pattern on the side which is seen.
- ▒▒ : Pattern of the rear side.
- □ : Chip components extracted from the rear side.
- CND: Canadian

● Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D1	J-14	D716	B-2	Q302	F-10
D2	H-14	D717	A-2	Q303	F-11
D3	G-13	D718	A-2	Q304	E-13
D4	I-13	D719	A-2	Q305	E-12
D101	F-8	D720	B-1	Q306	E-9
D201	F-10	D721	B-1	Q307	E-9
D301	F-11	D722	B-2	Q308	E-9
D302	F-11	D723	B-1	Q309	E-8
D303	F-12	D724	A-2	Q310	F-12
D304	I-10	D725	A-1	Q311	F-12
D305	E-8	D851	I-21	Q312	F-12
D306	E-8			Q313	F-11
D307	E-8	IC1	H-14	Q314	F-13
D308	E-13	IC2	I-13	Q315	F-13
D309	E-10	IC101	G-12	Q316	F-14
D310	E-8	IC102	G-12	Q317	F-12
D312	G-11	IC103	H-13	Q318	F-12
D314	F-10	IC104	G-9	Q319	F-12
D315	F-11	IC105	G-6	Q320	F-13
D316	F-11	IC106	G-6	Q321	F-13
D317	F-13	IC107	G-6	Q322	E-13
D318	F-14	IC108	G-6	Q323	E-14
D319	F-14	IC109	E-10	Q324	E-14
D320	F-14	IC110	H-11	Q325	E-15
D321	F-14	IC111	E-4	Q326	I-13
D322	F-14	IC112	E-11	Q327	E-11
D323	F-12	IC301	I-9	Q328	E-11
D324	F-13	IC302	E-9	Q501	G-23
D325	E-13	IC303	H-9	Q601	G-22
D326	E-14	IC304	I-11		
D327	J-13	IC501	G-22		
D328	E-12	IC801	I-21		
D329	G-11	IC802	I-22		
D331	F-14				
D551	F-21	Q1	I-14		
D701	B-7	Q2	H-14		
D702	B-7	Q3	G-14		
D703	B-7	Q4	G-14		
D704	A-7	Q5	G-14		
D705	A-6	Q6	G-12		
D706	A-6	Q7	G-12		
D707	A-5	Q8	G-13		
D708	B-4	Q9	G-13		
D709	A-4	Q10	G-13		
D710	B-4	Q11	I-14		
D711	B-4	Q12	H-14		
D712	A-4	Q13	G-14		
D713	B-3	Q102	E-11		
D714	A-3	Q202	F-11		
D715	B-3	Q301	I-11		

【KEY BOARD】(COMPONENT SIDE)

【MAIN BOARD】(COMPONENT SIDE)

【KEY BOARD】(CONDUCTOR SIDE)

【MAIN BOARD】
(CONDUCTOR SIDE)

D4:XR-7150 AEP/XR-7152

XR-7152

BLAKET CONNECTOR

【SWITCH BOARD】

【PM BOARD】

【REEL BOARD】

Q305,0322,R378,R379 : XR-7152

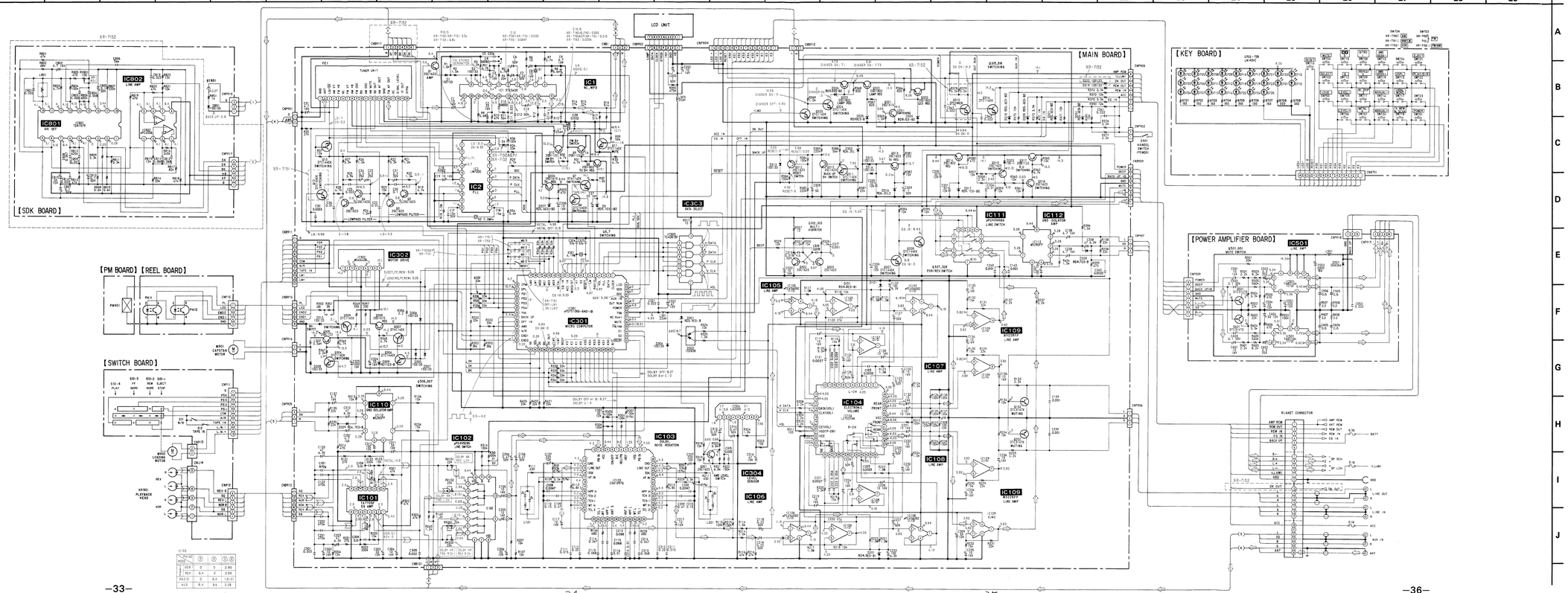
【POWER AMPLIFIER BOARD】

LCD UNIT

STEREO MONO LOCAL SK SDK
LOUD INTRO REPEAT BL.SKIP
MUTE METAL TRA

【SDK BOARD】

XR-7152



- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component
- ▬ : B+ Line
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM or PLAY
  ( ) : AM
- Voltages are taken with a VOM (50 kΩ/V). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM ⇨ : PB
- Switch

Ref. No.	Switch	Position
S10-1	EJECT STOP	OFF
S10-2	REW (NOR)	OFF
S10-3	FF (NOR)	OFF
S10-4	PLAY	OFF
S11	N/R	OFF
S12	TAPE IN	OFF
SW301	LW1/LW2	LW1
SW701	POWER	OFF
SW702	LOUD	OFF
SW703	SELECT	OFF
SW704	MUTE	OFF
SW705	LEVEL –	OFF
SW706	LEVEL +	OFF
SW707	4/METAL	OFF
SW708	1/INTRO	OFF
SW709	2/REPEAT	OFF
SW710	5/DOLBY	OFF
SW711	3/BL. SKIP	OFF
SW712	6	OFF
SW713	AMS/SEEK –	OFF
SW714	MANUAL –	OFF
SW715	DSPL	OFF
SW716	RESET	OFF
SW717	LOCAL/MONO	OFF
SW718	A. MEM/M. SCAN	OFF
SW719	AMS/SEEK +	OFF
SW720	MANUAL +	OFF
SW721	EJECT	OFF
SW722	PLAY/DIR	OFF
SW723	XR-7150/7151: FM	OFF
	XR-7152: FM/AM	OFF
	XR-7150: AM	OFF
SW724	XR-7151: MW/LW	OFF
	XR-7152: SDK	OFF

- CND: Canadian

XR-7150/7151/7152

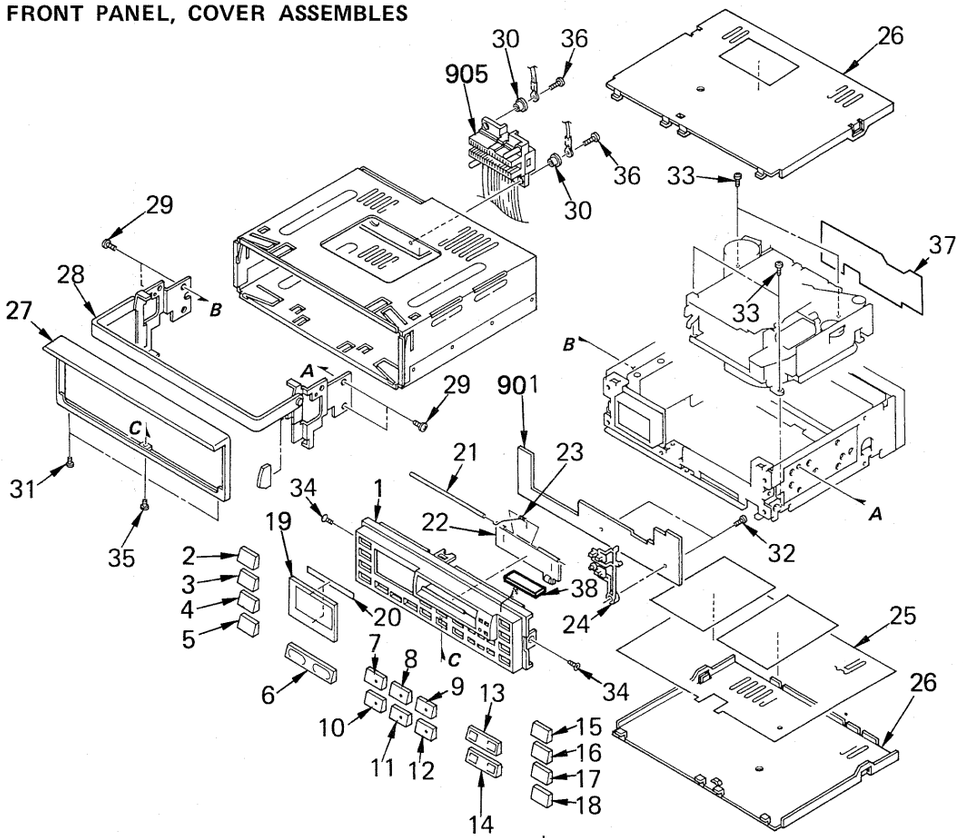
SECTION 5

EXPLODED VIEWS

NOTE:

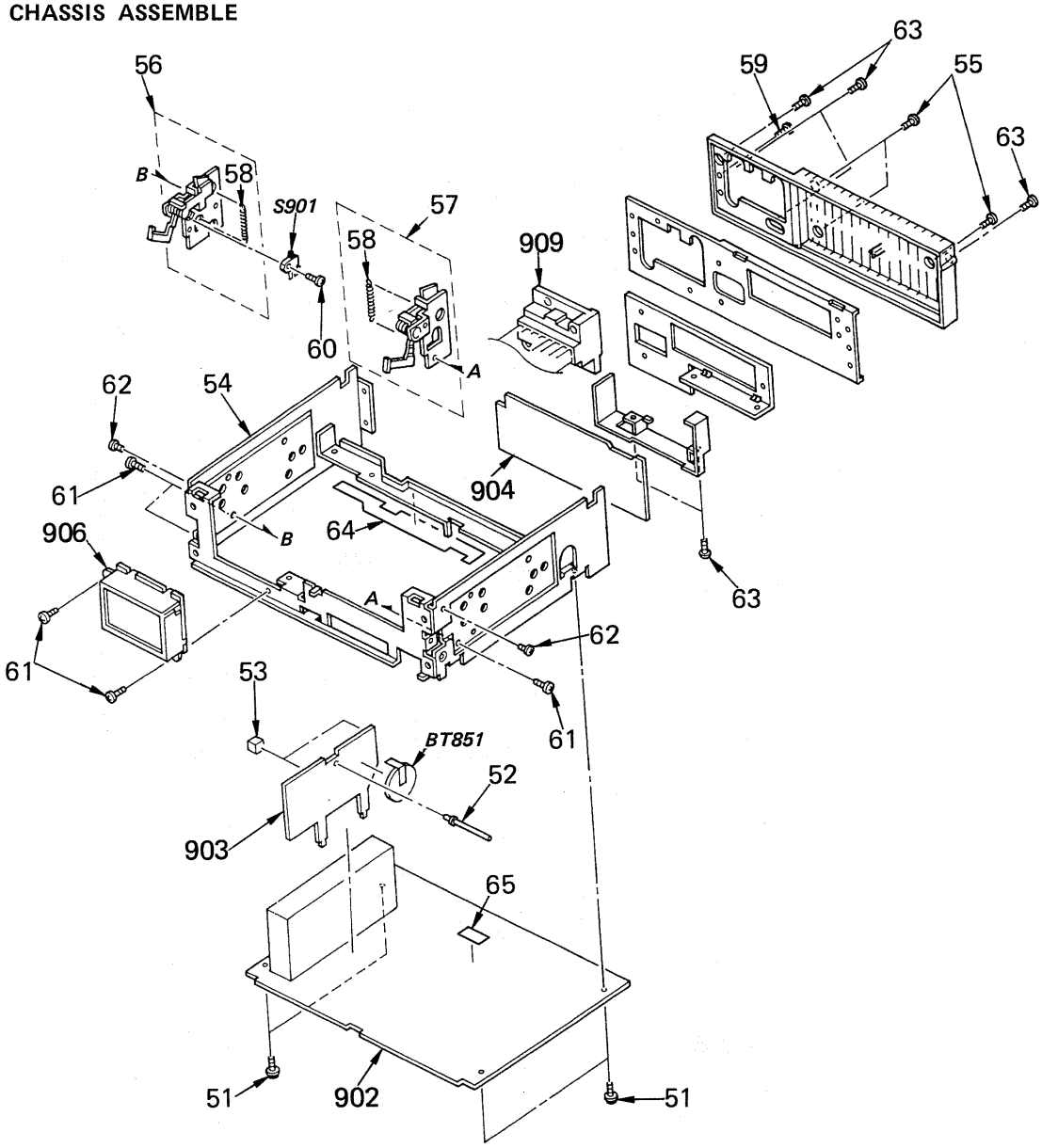
- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ Cabinet's Color
  ↑ Parts' Color

(1) FRONT PANEL, COVER ASSEMBLES



No.	Part No.	Description	Remarks
1	3-344-521-11	(7150:US,Canadian,AEP/7151)..PANEL, FRONT	
	3-344-521-21	(7152).....PANEL, FRONT	
2	3-344-516-11	BUTTON (LU:N1)(POWER)	
3	3-344-511-01	BUTTON (M:N1)(LOUD)	
4	3-344-511-11	BUTTON (M:N1)(SELECT)	
5	3-344-518-01	BUTTON (LD:N1)(MUTE)	
6	3-344-514-01	BUTTON (M:S3)(LEVEL)	
7	3-344-512-01	BUTTON (M:N1P)(1)	
8	3-344-512-11	BUTTON (M:N1P)(2)	
9	3-344-512-21	BUTTON (M:N1P)(3)	
10	3-344-512-61	BUTTON (M:N1P)(4)	
11	3-344-512-71	BUTTON (M:N1P)(5)	
12	3-344-512-81	BUTTON (M:N1P)(6)	
13	3-344-513-01	BUTTON (M:S2)(AMS)	
14	3-344-513-21	BUTTON (M:S2)(FF/REW)	
15	3-344-515-01	BUTTON (RU:N1)(EJECT)	
16	3-344-511-41	BUTTON (M:N1)(PLAY)	
17	3-344-511-51	(7150:US,Canadian,AEP/7151) ...BUTTON (M:N1)(FM)	
	3-344-511-61	(7152)...BUTTON (M:N1)(FM/AM)	
18	3-344-517-11	(7150:US,Canadian,AEP) ...BUTTON (RD:N1)(AM)	
	3-344-517-21	(7151).....BUTTON (RD:N1)(MW/LW)	
	3-344-517-31	(7152).....BUTTON (RD:N1)(SDK)	
19	3-344-505-01	PLATE, INDICATION	
20	*3-325-757-01	SHEET, ADHESIVE	
21	3-332-130-01	SHAFT, C DOOR	
22	A-3249-062-A	(7150:US,Canadian,AEP) ...DOOR ASSY, CASSETTE	
	A-3249-116-A	(7151).....DOOR ASSY, CASSETTE	
	A-3249-117-A	(7152).....DOOR ASSY, CASSETTE	
23	3-332-131-01	SPRING	
24	3-344-519-01	BUTTON (D)	
25	*3-344-560-11	INSULATOR (3)	
26	*3-332-151-11	COVER	
27	3-344-564-01	(7150:US,Canadian,AEP/7152) ...FRAME, ORNAMENTAL	
28	X-3344-508-1	HANDLE ASSY	
29	3-344-561-01	SCREW (M4X5)	
30	3-344-536-01	COLLAR (JACK)	
31	7-627-553-38	SCREW, PRECISION +P 2X3	
32	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
33	7-621-773-86	SCREW +PTT 2.6X4 (S)	
34	7-682-246-09	SCREW +K 3X5	
35	7-621-283-00	(7150:US,Canadian,AEP/7152)..SCREW +P 2X5	
36	7-682-548-04	SCREW +B 3X8	
37	*3-344-590-01	INSULATOR (5)	
38	3-344-593-01	(7150/7151)...CAUTION LABEL	
	3-344-595-01	(7152) .....CAUTION LABEL	
901	*1-626-654-11	PC BOARD, KEY	
905	1-559-921-11	(7150:US,Canadian,AEP/7151) ...CORD (WITH CONNECTOR)	
	1-559-924-11	(7152)...CORD (WITH CONNECTOR)	

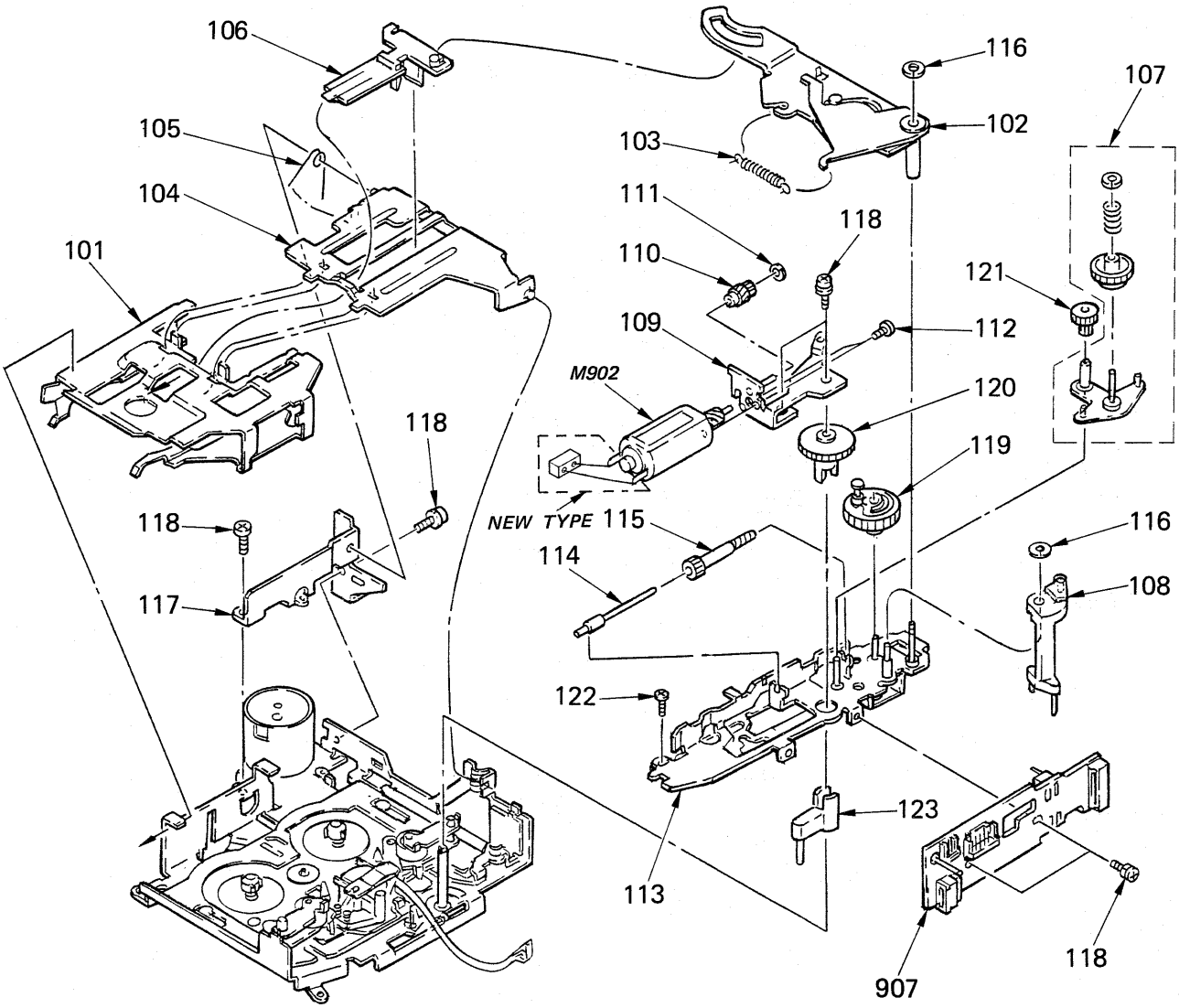
(2) CHASSIS ASSEMBLE



No.	Part No.	Description	Remarks
51	3-344-501-01	SCREW (+ PTT 3X6), GROUND POINT	
52	*3-847-723-00	PIN, LEAD	
53	9-911-841-XX	CUSHION	
54	X-3344-501-1	(7150:US,Canadian,AEP/7151) ...CHASSIS ASSY	58
	X-3344-511-1	(7152).....CHASSIS ASSY	
55	7-685-645-79	SCREW +P 3X6 TYPE2 NON-SLIT	
56	X-3344-502-1	LOCK ASSY (LEFT)	58
57	X-3344-503-1	LOCK ASSY (RIGHT)	58
58	3-645-189-00	SPRING, TENSION	
59	7-621-770-87	SCREW +PTT 2.6X5 (S)	
60	7-621-283-00	(7150:US,Canadian,AEP/7152) ...SCREW +P 2X5	

No.	Part No.	Description	Remarks
61	7-621-773-86	SCREW +PTT 2.6X4 (S)	
62	7-627-553-38	SCREW, PRECISION +P 2X3	
63	7-682-147-01	SCREW +PTT 3X6 (S)	
64	*3-344-589-01	INSULATOR (4)	
65	3-564-738-00	SPACER	
902	*A-3216-508-A	(7150:US,Canadian) ...PC BOARD ASSY, MAIN	
	*A-3216-586-A	(7150:AEP)...PC BOARD ASSY, MAIN	
	*A-3216-590-A	(7151).....PC BOARD ASSY, MAIN	
	*A-3216-591-A	(7152).....PC BOARD ASSY, MAIN	
903	*1-626-656-11	PC BOARD, SDK	
904	*1-626-655-11	PC BOARD, POWER AMPLIFIER	
906	1-808-393-11	LISPLAY PANEL, LIQUID CRYSTAL	
909	1-559-920-11	CORD (WITH CONNECTOR)	
S901	1-570-771-11	SWITCH (POWER)	

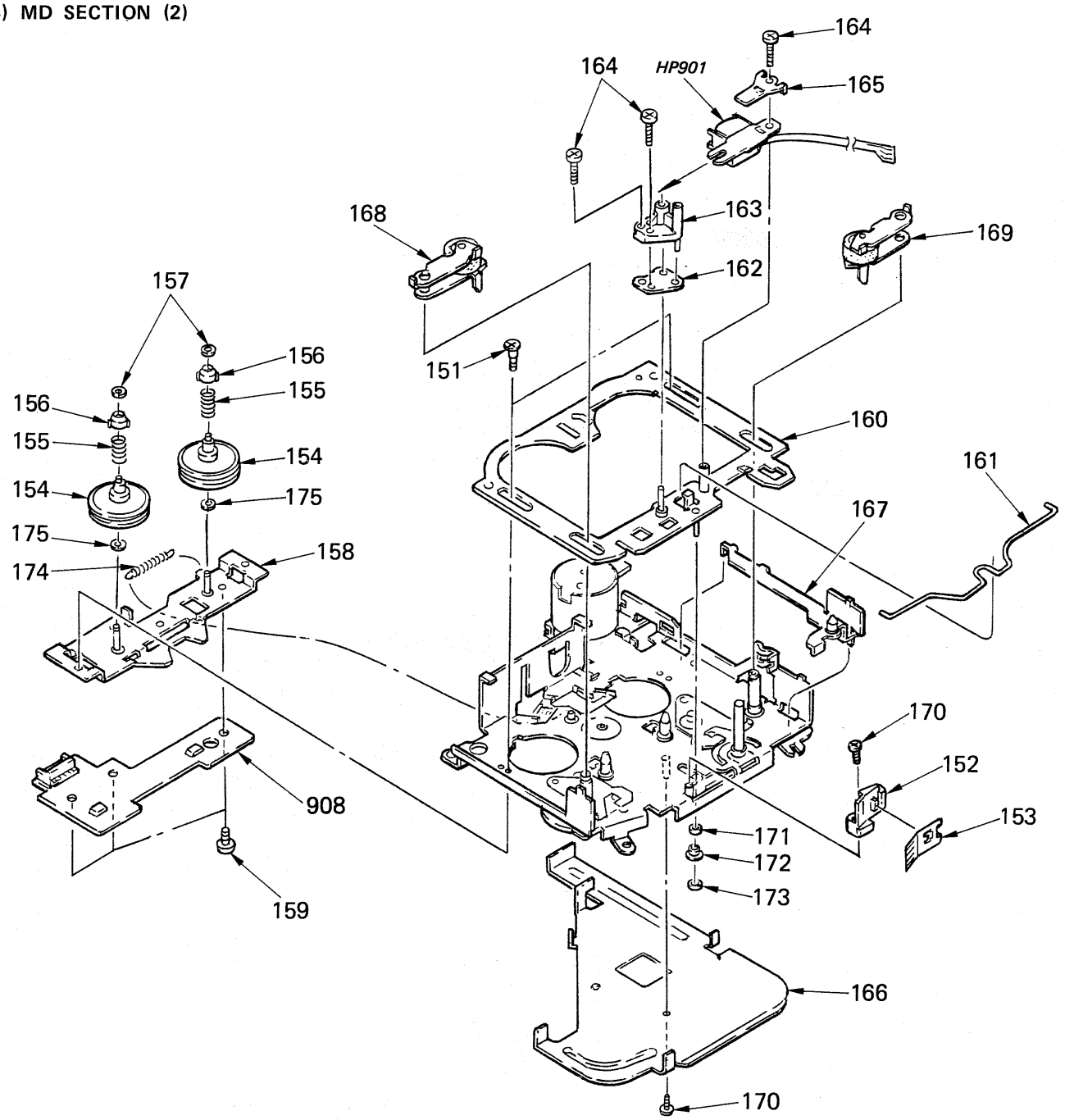
(3) MD SECTION (1)



No.	Part No.	Description	Remarks
101	*3-344-103-01	HOUSING, CASSETTE	
102	*X-3344-121-1	ARM ASSY, SUCTION	
103	3-344-216-01	SPRING (SUCTION ARM), TENSION	
104	*X-3344-120-1	HANGER ASSY, HOUSING	
105	3-344-113-01	SPRING	
106	*3-344-118-01	CATCHER	
107	A-3239-954-A	GEAR ASSY, DRIVING ARM	
108	*X-3344-122-1	ARM ASSY, REVERSE	
109	*X-3344-110-1	BRACKET ASSY, MOTOR	
110	3-344-170-01	GEAR (A), DRIVING	
111	3-344-223-01	WASHER	
112	7-627-553-27	SCREW, PRECISION +P 2X2.5	
113	*X-3344-108-1	CHASSIS ASSY, MCU	

No.	Part No.	Description	Remarks
114	*3-344-157-01	SHAFT, DRIVING GEAR (B)	
115	3-344-156-01	GEAR (B), DRIVING	
116	3-344-222-01	WASHER	
117	*3-344-112-11	BRACKET, HANGER	
118	7-628-253-00	SCREW +PS 2X4	
119	X-3344-119-1	GEAR ASSY, LOADING CAM	
120	3-344-114-01	GEAR, MODE	
121	3-344-108-01	GEAR (A), FRICTION	
122	7-621-255-25	SCREW +P 2X4	
123	X-3344-117-1	ARM ASSY, MODE	
907	*1-624-413-11	PC BOARD, SWITCH	
M902	A-3239-956-A	(FORMER)...MOTOR SUB ASSY, L	
	A-3239-956-B	(NEW).....MOTOR SUB ASSY, L	

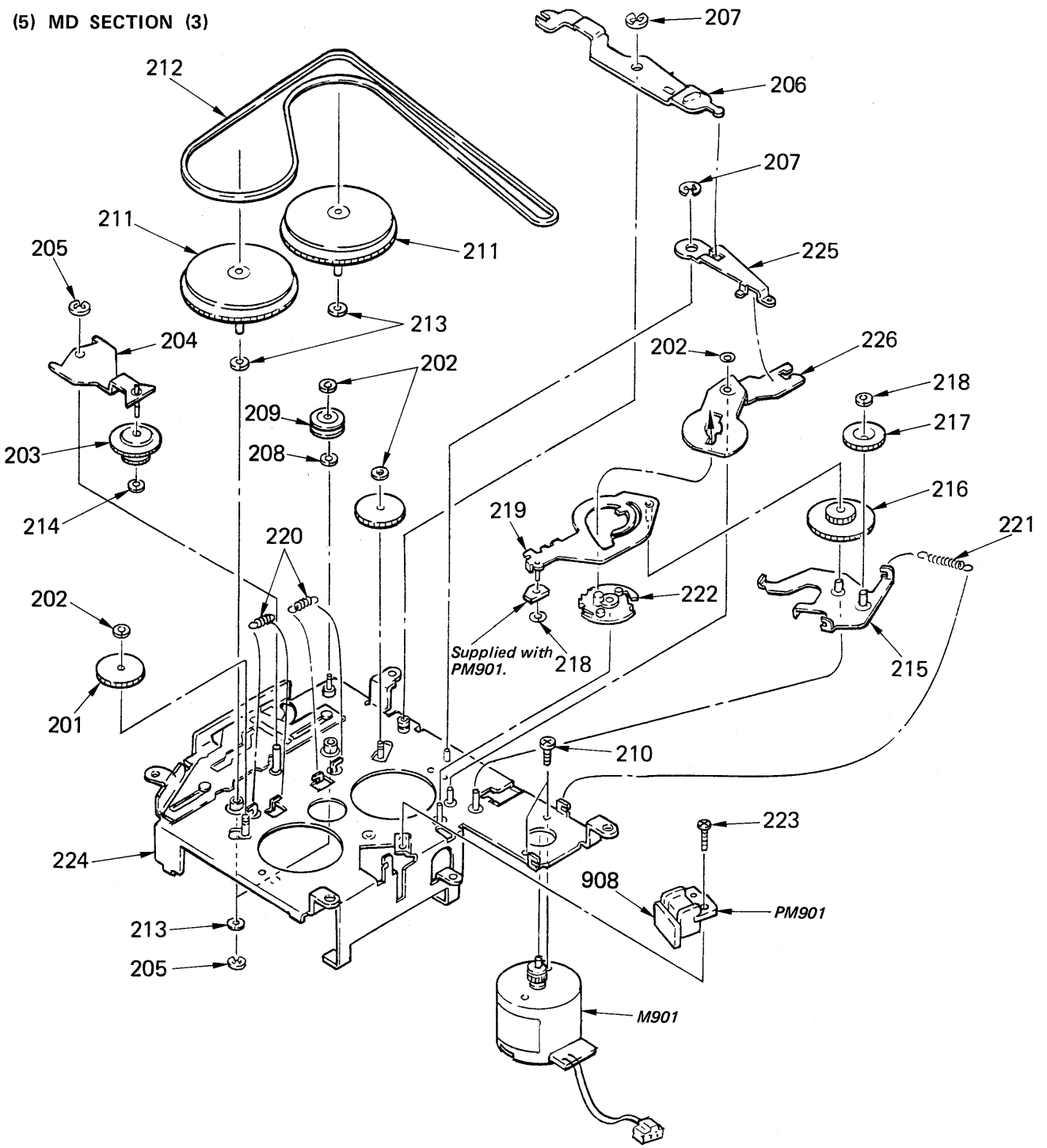
(4) MD SECTION (2)



No.	Part No.	Description	Remarks
151	3-344-110-01	SCREW (HB), STEP	
152	*3-344-154-01	HOLDER, CONTACT	
153	3-344-155-01	CONTACT (SWITCH)	
154	X-3344-104-1	TABLE ASSY, REEL	
155	3-344-143-01	SPRING (BT), COMPRESSION	
156	3-344-136-01	CAP, REEL	
157	3-344-224-01	WASHER	
158	*X-3344-105-1	BRACKET ASSY, REEL TABLE	
159	7-627-553-27	SCREW, PRECISION +P 2X2.5	
160	*X-3344-103-1	BASE ASSY, HEAD	
161	3-344-129-01	SPRING	
162	3-344-128-01	SEAM, DAH	
163	3-344-127-01	ARM, DAH	
164	7-627-850-67	SCREW, PRECISION +P 1.4X4	

No.	Part No.	Description	Remarks
165	3-344-130-01	RETAINER, HEAD	
166	*3-344-220-01	COVER, MD	
167	*X-3344-118-1	LEVER ASSY, RVS CONVERSION	
168	X-3344-116-1	ARM (F) ASSY, PINCH	
169	X-3344-115-1	ARM (R) ASSY, PINCH	
170	7-627-850-18	SCREW, PRECISION +P 1.4X2.5	
171	3-344-117-01	ROLLER (B), H/B	
172	3-344-116-01	ROLLER (A), H/B	
173	3-344-222-01	WASHER	
174	3-344-217-01	SPRING (CAM LOCK LEVER), TENTION	
175	3-701-437-11	POLY-SLIDER (A)	
908	*1-624-412-11	PC BOARD, REEL	
HP901	1-543-506-11	HEAD, MAGNETIC (PLAYBACK)	

(5) MD SECTION (3)



No.	Part No.	Description	Remarks
201	3-344-104-01	GEAR, PLAY	
202	3-344-222-01	WASHER	
203	X-3344-102-1	GEAR ASSY, FR	
204	*X-3344-101-1	ARM ASSY, FR	
205	3-590-768-00	RING (A), E	
206	*3-344-107-01	ARM, POWER	
207	7-624-104-04	STOP RING 2.0, TYPE -E	
208	3-701-436-01	WASHER, 1.6	
209	3-344-105-01	PULLEY (ASSY), MIDWAY	
210	7-627-553-27	SCREW, PRECISION +P 2X2.5	
211	3-344-109-01	FLYWHEEL (ASSY)	
212	3-344-115-01	BELT	
213	3-701-437-11	POLY-SLIDER (A)	
214	3-344-224-01	WASHER	
215	*X-3344-106-1	LEVER ASSY, RVS GEAR (B)	

No.	Part No.	Description	Remarks
216	3-344-146-01	GEAR (B), RVS	
217	3-344-147-01	GEAR (A), RVS	
218	3-344-223-01	WASHER	
219	X-3344-107-1	LEVER ASSY, CAM LOCK	
220	3-344-218-01	SPRING (PLAY ARM), TENSION	
221	3-344-215-01	SPRING, TENSION	
222	3-344-119-01	GEAR, RVS CAM	
223	7-627-850-67	SCREW, PRECISION +P 1.4X4	
224	*X-3344-113-1	CHASSIS ASSY, MECHANICAL	
225	*3-344-106-01	LEVER, LDG	
226	*X-3344-114-1	LEVER ASSY, RVS	
908	*1-624-412-11	PC BOARD, PLUNGER	
M901	A-3239-951-A	MOTOR SUB ASSY, CAPSTAN	
PM901	1-454-461-11	SOLENOID, PLUNGER	

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.
- CND: Canadian

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

Ref.No.	Part No.	Description			
901	*1-626-654-11	PC BOARD, KEY			
902	*A-3216-508-A	(7150:US,Canadian)..PC BOARD ASSY, MAIN			
	*A-3216-586-A	(7150:AEP)...PC BOARD ASSY, MAIN			
	*A-3216-590-A	(7151).....PC BOARD ASSY, MAIN			
	*A-3216-591-A	(7152).....PC BOARD ASSY, MAIN			
903	*1-626-656-11	PC BOARD, SDK			
904	*1-626-655-11	PC BOARD, POWER AMPLIFIER			
905	1-559-921-11	(7152:US,Canadian,AEP/7151) ...CORD (WITH CONNECTOR)			
	1-559-924-11	(7152)...CORD (WITH CONNECTOR)			
906	1-808-393-11	LISPLAY PANEL, LIQUID CRYSTAL			
907	*1-624-413-11	PC BOARD, SWITCH			
908	*1-624-412-11	PC BOARD, REEL			
	*1-624-412-11	PC BOARD, PLUNGER			
909	1-559-920-11	CORD (WITH CONNECTOR)			
BT851	1-528-225-31	BATTERY, LITHIUM			
C1	1-126-157-11	ELECT	10MF	20%	16V
C2	1-124-234-00	ELECT	22MF	20%	16V
C3	1-126-094-11	ELECT	4.7MF	20%	16V
C4	1-130-482-00	MYLAR	0.0082MF	5%	50V
C5	1-163-189-00	CERAMIC MELF	220PF	10%	50V
C6	1-124-255-00	ELECT	1MF	20%	50V
C7	1-124-464-11	ELECT	0.22MF	20%	50V
C8	1-126-157-11	ELECT	10MF	20%	16V
C9	1-126-094-11	ELECT	4.7MF	20%	16V
C10	1-163-053-00	CERAMIC MELF	0.0033MF	20%	16V
C11	1-163-063-00	CERAMIC MELF	0.022MF		25V
C12	1-163-055-00	(7152)...CERAMIC MELF	0.0047MF	20%	16V
C12	1-163-063-00	(7150/7151)..CERAMIC MELF	0.022MF		25V
C13	1-124-255-00	ELECT	1MF	20%	50V
C14	1-130-480-00	(7152)...MYLAR	0.0056MF	5%	50V
C14	1-136-155-00	(7150:AEP/7151) ...FILM	0.015MF	5%	50V
C14	1-163-157-00	(7150:US,Canadian) ...FILM	0.022MF	5%	50V
C15	1-130-480-00	(7152)...MYLAR	0.0056MF	5%	50V
C15	1-136-155-00	(7150:AEP/7151) ...FILM	0.015MF	5%	50V
C15	1-163-157-00	(7150:US,Canadian) ...FILM	0.022MF	5%	50V
C16	1-163-161-00	CERAMIC MELF	15PF	5%	50V
C17	1-163-161-00	CERAMIC MELF	15PF	5%	50V
C18	1-163-063-00	CERAMIC MELF	0.022MF		25V
C19	1-126-157-11	ELECT	10MF	20%	16V

Ref.No.	Part No.	Description			
C20	1-136-165-00	FILM	0.1MF	5%	50V
C21	1-124-257-00	ELECT	2.2MF	20%	35V
C22	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C23	1-126-162-11	ELECT	3.3MF	20%	25V
C24	1-126-162-11	ELECT	3.3MF	20%	25V
C25	1-163-157-00	FILM	0.022MF	5%	50V
C26	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C27	1-124-242-00	ELECT	33MF	20%	16V
C28	1-163-063-00	CERAMIC MELF	0.022MF		25V
C29	1-163-063-00	CERAMIC MELF	0.022MF		25V
C30	1-163-053-00	CERAMIC MELF	0.0033MF	20%	16V
C31	1-126-094-11	ELECT	4.7MF	20%	16V
C101	1-130-467-00	MYLAR	470PF	5%	50V
C102	1-130-467-00	MYLAR	470PF	5%	50V
C103	1-126-154-11	ELECT	47MF	20%	6.3V
C104	1-136-153-00	FILM	0.01MF	5%	50V
C105	1-126-157-11	ELECT	10MF	20%	16V
C106	1-124-465-00	ELECT	0.47MF	20%	50V
C107	1-126-176-11	ELECT	220MF	20%	10V
C108	1-130-479-00	MYLAR	0.0047MF	5%	50V
C109	1-136-173-00	FILM	0.47MF	5%	50V
C110	1-136-167-00	FILM	0.15MF	5%	50V
C111	1-130-485-00	MYLAR	0.015MF	5%	50V
C112	1-136-169-00	FILM	0.22MF	5%	50V
C113	1-136-175-00	FILM	0.068MF	5%	50V
C114	1-136-161-00	FILM	0.047MF	5%	50V
C115	1-130-481-00	MYLAR	0.0068MF	5%	50V
C116	1-136-153-00	FILM	0.01MF	5%	50V
C117	1-126-157-11	ELECT	10MF	20%	16V
C118	1-124-464-11	ELECT	0.22MF	20%	50V
C119	1-126-157-11	ELECT	10MF	20%	16V
C120	1-163-167-00	CERAMIC CHIP	27PF	5%	50V
C121	1-130-476-00	MYLAR	0.0027MF	5%	50V
C122	1-136-162-00	FILM	0.056MF	5%	50V
C123	1-136-162-00	FILM	0.056MF	5%	50V
C124	1-126-157-11	ELECT	10MF	20%	16V
C125	1-130-477-00	MYLAR	0.0033MF	5%	50V
C126	1-124-255-00	ELECT	1MF	20%	50V
C127	1-124-255-00	ELECT	1MF	20%	50V
C128	1-126-157-11	ELECT	10MF	20%	16V
C129	1-124-464-11	ELECT	0.22MF	20%	50V
C130	1-126-157-11	ELECT	10MF	20%	16V
C131	1-126-157-11	ELECT	10MF	20%	16V
C132	1-126-157-11	ELECT	10MF	20%	16V
C133	1-124-225-00	ELECT	100MF	20%	6.3V
C134	1-126-157-11	ELECT	10MF	20%	16V

Ref.No.	Part No.	Description			
C135	1-126-157-11	ELECT	10MF	20%	16V
C136	1-126-157-11	ELECT	10MF	20%	16V
C137	1-126-094-11	ELECT	4.7MF	20%	16V
C138	1-126-094-11	ELECT	4.7MF	20%	16V
C139	1-163-205-00	CERAMIC MELF	0.001MF	10%	50V
C140	1-163-205-00	CERAMIC CHIP	0.001MF	10%	50V
C201	1-130-467-00	MYLAR	470PF	5%	50V
C202	1-130-467-00	MYLAR	470PF	5%	50V
C203	1-126-154-11	ELECT	47MF	20%	6.3V
C204	1-136-153-00	FILM	0.01MF	5%	50V
C205	1-126-157-11	ELECT	10MF	20%	16V
C206	1-124-465-00	ELECT	0.47MF	20%	50V
C207	1-126-176-11	ELECT	220MF	20%	10V
C208	1-130-479-00	MYLAR	0.0047MF	5%	50V
C209	1-136-173-00	FILM	0.47MF	5%	50V
C210	1-136-167-00	FILM	0.15MF	5%	50V
C211	1-130-485-00	MYLAR	0.015MF	5%	50V
C212	1-136-169-00	FILM	0.22MF	5%	50V
C213	1-136-175-00	FILM	0.068MF	5%	50V
C214	1-136-161-00	FILM	0.047MF	5%	50V
C215	1-130-481-00	MYLAR	0.0068MF	5%	50V
C216	1-136-153-00	FILM	0.01MF	5%	50V
C217	1-126-157-11	ELECT	10MF	20%	16V
C218	1-124-464-11	ELECT	0.22MF	20%	50V
C219	1-126-157-11	ELECT	10MF	20%	16V
C220	1-163-167-00	CERAMIC CHIP	27PF	5%	50V
C221	1-130-476-00	MYLAR	0.0027MF	5%	50V
C222	1-136-162-00	FILM	0.056MF	5%	50V
C223	1-136-162-00	FILM	0.056MF	5%	50V
C224	1-126-157-11	ELECT	10MF	20%	16V
C225	1-130-477-00	MYLAR	0.0033MF	5%	50V
C226	1-124-255-00	ELECT	1MF	20%	50V
C227	1-124-255-00	ELECT	1MF	20%	50V
C228	1-126-157-11	ELECT	10MF	20%	16V
C229	1-124-464-11	ELECT	0.22MF	20%	50V
C230	1-126-157-11	ELECT	10MF	20%	16V
C231	1-126-157-11	ELECT	10MF	20%	16V
C232	1-126-157-11	ELECT	10MF	20%	16V
C233	1-124-225-00	ELECT	100MF	20%	6.3V
C234	1-126-157-11	ELECT	10MF	20%	16V
C235	1-126-157-11	ELECT	10MF	20%	16V
C236	1-126-157-11	ELECT	10MF	20%	16V
C237	1-126-094-11	ELECT	4.7MF	20%	16V
C238	1-126-094-11	ELECT	4.7MF	20%	16V
C239	1-163-205-00	CERAMIC MELF	0.001MF	10%	50V
C240	1-163-205-00	CERAMIC CHIP	0.001MF	10%	50V
C301	1-163-063-00	CERAMIC MELF	0.022MF		25V
C302	1-126-157-11	ELECT	10MF	20%	16V
C303	1-124-229-00	ELECT	33MF	20%	10V
C304	1-126-157-11	ELECT	10MF	20%	16V
C305	1-163-063-00	CERAMIC MELF	0.022MF		25V
C306	1-124-229-00	ELECT	33MF	20%	10V
C307	1-124-229-00	ELECT	33MF	20%	10V
C308	1-124-584-00	ELECT	100MF	20%	10V
C309	1-124-229-00	ELECT	33MF	20%	10V
C310	1-126-154-11	ELECT	47MF	20%	6.3V
C311	1-124-229-00	ELECT	33MF	20%	10V
C312	1-124-584-00	ELECT	100MF	20%	10V

Ref.No.	Part No.	Description			
C313	1-124-465-00	ELECT	0.47MF	20%	50V
C314	1-124-465-00	ELECT	0.47MF	20%	50V
C315	1-163-157-00	FILM	0.022MF	5%	50V
C316	1-124-589-11	ELECT	47MF	20%	10V
C317	1-163-205-00	CERAMIC MELF	0.001MF	10%	50V
C318	1-136-156-00	FILM	0.018MF	5%	50V
C319	1-136-156-00	FILM	0.018MF	5%	50V
C320	1-126-157-11	ELECT	10MF	20%	16V
C321	1-163-063-00	CERAMIC CHIP	0.022MF	10%	50V
C322	1-124-589-11	ELECT	47MF	20%	10V
C323	1-163-169-00	CERAMIC CHIP	33PF	5%	50V
C324	1-163-169-00	CERAMIC CHIP	33PF	5%	50V
C325	1-124-360-00	ELECT	1000MF	20%	16V
C326	1-124-242-00	ELECT	33MF	20%	16V
C328	1-124-255-00	ELECT	1MF	20%	50V
C329	1-124-255-00	ELECT	1MF	20%	50V
C330	1-124-229-00	ELECT	33MF	20%	10V
C331	1-124-229-00	ELECT	33MF	20%	10V
C332	1-126-157-11	ELECT	10MF	20%	16V
C333	1-124-255-00	ELECT	1MF	20%	50V
C334	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C335	1-124-229-00	ELECT	33MF	20%	10V
C336	1-126-157-11	ELECT	10MF	20%	16V
C337	1-124-584-00	ELECT	100MF	20%	10V
C338	1-126-154-11	ELECT	47MF	20%	6.3V
C339	1-124-229-00	ELECT	33MF	20%	10V
C340	1-163-213-00	CERAMIC MELF	0.0022MF	20%	16V
C341	1-163-063-00	CERAMIC MELF	0.022MF		25V
C342	1-163-063-00	CERAMIC MELF	0.022MF		25V
C343	1-163-063-00	CERAMIC MELF	0.022MF		25V
C501	1-126-157-11	ELECT	10MF	20%	16V
C502	1-126-162-11	ELECT	3.3MF	20%	25V
C503	1-124-463-00	ELECT	0.1MF	20%	50V
C504	1-124-229-00	ELECT	33MF	20%	10V
C505	1-130-497-00	MYLAR	0.15MF	5%	50V
C506	1-130-497-00	MYLAR	0.15MF	5%	50V
C551	1-126-176-11	ELECT	220MF	20%	10V
C552	1-124-343-00	ELECT	2200MF	20%	16V
C553	1-163-063-00	CERAMIC MELF	0.022MF		25V
C601	1-126-157-11	ELECT	10MF	20%	16V
C602	1-126-162-11	ELECT	3.3MF	20%	25V
C603	1-124-463-00	ELECT	0.1MF	20%	50V
C604	1-124-229-00	ELECT	33MF	20%	10V
C605	1-130-497-00	MYLAR	0.15MF	5%	50V
C606	1-130-497-00	MYLAR	0.15MF	5%	50V
C801	1-130-477-00	(7152)...FILM	0.0033MF	5%	50V
C802	1-126-094-11	(7152)...ELECT	4.7MF	20%	16V
C803	1-136-175-00	(7152)...FILM	0.068MF	5%	50V
C804	1-136-175-00	(7152)...FILM	0.068MF	5%	50V
C805	1-124-463-00	(7152)...ELECT	0.1MF	20%	50V
C806	1-163-175-00	(7152)...CERAMIC	MELF 56PF	5%	50V
C807	1-124-463-00	(7152)...ELECT	0.1MF	20%	50V
C808	1-136-161-00	(7152)...FILM	0.047MF	5%	50V
C809	1-136-161-00	(7152)...FILM	0.047MF	5%	50V
C810	1-124-463-00	(7152)...ELECT	0.1MF	20%	50V
C811	1-136-175-00	(7152)...FILM	0.068MF	5%	50V
C812	1-136-175-00	(7152)...FILM	0.068MF	5%	50V

Ref.No.	Part No.	Description
C813	1-163-157-00	(7152)...FILM 0.022MF 5% 50V
C814	1-163-157-00	(7152)...FILM 0.022MF 5% 50V
C815	1-124-229-00	(7152)...ELECT 33MF 20% 10V
CNJ11	*1-566-007-11	PIN, CONNECTOR (PC BOARD) 10P
CNJ14	1-565-038-11	CONNECTOR, F.P.C 5P
CNP12	*1-566-003-11	PIN, CONNECTOR (PC BOARD) 6P
CNP13	*1-564-012-00	PIN, CONNECTOR 2P
CNP15	*1-564-015-00	PIN, CONNECTOR 5P
CNP901	*1-564-001-11	PIN, CONNECTOR 2P
CNP902	1-506-984-11	PIN CONNECTOR (PC BOARD) 2P
CNP904	*1-566-011-11	PIN, CONNECTOR (PC BOARD) 14P
CNP905	*1-564-013-00	PIN, CONNECTOR 3P
CNP906	*1-564-002-00	PIN, CONNECTOR 3P
CNP907	*1-564-002-00	PIN, CONNECTOR 3P
CNP908	*1-564-007-00	PIN, CONNECTOR 8P
CNP909	*1-566-005-11	PIN, CONNECTOR (PC BOARD) 8P
CNP910	*1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P
CNP916	*1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P
CNP917	*1-506-988-11	(7152)...PIN, CONNECTOR (PC BOARD) 6P
CNP918	*1-564-214-11	PIN, CONNECTOR 3P
CNP919	1-564-519-11	PLUG, CONNECTOR 4P
D1	8-719-901-33	DIODE 1SS133
D2	8-719-901-33	DIODE 1SS133
D3	8-719-110-13	DIODE RD9.1ES-B2
D4	8-719-901-33	DIODE 1SS133
D101	8-719-109-74	DIODE RD4.3ES-B1
D201	8-719-109-74	DIODE RD4.3ES-B1
D301	8-719-109-70	DIODE RD3.9ES-B
D302	8-719-104-31	DIODE 1S2838
D303	8-719-101-61	DIODE RD6.2EL2
D304	8-719-901-33	DIODE 1SS133
D305	8-719-901-33	DIODE 1SS133
D306	8-719-901-33	DIODE 1SS133
D307	8-719-901-33	DIODE 1SS133
D308	8-719-901-33	DIODE 1SS133
D309	8-719-110-19	DIODE RD11ES-B
D310	8-719-901-33	DIODE 1SS133
D312	8-719-901-33	DIODE 1SS133
D314	8-719-901-33	DIODE 1SS133
D315	8-719-901-33	DIODE 1SS133
D316	8-719-101-61	DIODE RD6.2EL2
D317	8-719-110-13	DIODE RD9.1ES-B2
D318	8-719-109-89	DIODE RD5.6ES-B2
D319	8-719-901-33	DIODE 1SS133
D320	8-719-109-89	DIODE RD5.6ES-B2
D321	8-719-109-89	DIODE RD5.6ES-B2
D322	8-719-901-33	(7152)...DIODE 1SS133
D323	8-719-200-02	DIODE 10E-2
D324	8-719-110-13	DIODE RD9.1ES-B2
D325	8-719-110-15	DIODE RD10ES-B
D326	8-719-109-89	DIODE RD5.6ES-B2
D327	8-719-109-89	DIODE RD5.6ES-B2
D328	8-719-109-79	DIODE RD4.7ES-B
D329	8-719-109-79	DIODE RD4.7ES-B
D331	8-719-109-89	DIODE RD5.6ES-B2
D551	8-719-945-59	DIODE DSA3A4
D701	8-719-404-22	DIODE LN1451C

Ref.No.	Part No.	Description
D702	8-719-404-22	DIODE LN1451C
D703	8-719-404-22	DIODE LN1451C
D704	8-719-404-22	DIODE LN1451C
D705	8-719-404-22	DIODE LN1451C
D706	8-719-404-22	DIODE LN1451C
D707	8-719-404-22	DIODE LN1451C
D708	8-719-404-22	DIODE LN1451C
D709	8-719-404-22	DIODE LN1451C
D710	8-719-404-22	DIODE LN1451C
D711	8-719-404-22	DIODE LN1451C
D712	8-719-404-22	DIODE LN1451C
D713	8-719-404-22	DIODE LN1451C
D714	8-719-404-22	DIODE LN1451C
D715	8-719-404-22	DIODE LN1451C
D716	8-719-404-22	DIODE LN1451C
D717	8-719-404-22	DIODE LN1451C
D718	8-719-404-22	DIODE LN1451C
D719	8-719-404-22	DIODE LN1451C
D720	8-719-404-22	DIODE LN1451C
D721	8-719-404-22	DIODE LN1451C
D722	8-719-404-22	DIODE LN1451C
D723	8-719-404-22	DIODE LN1451C
D724	8-719-404-22	DIODE LN1451C
D725	8-719-404-22	DIODE LN1451C
D851	8-719-901-33	DIODE 1SS133
FE1	1-465-020-11	(7150/7152)...TUNER UNIT (FM,AM)
FE1	1-465-021-11	(7151).....TUNER UNIT (FM,MW,LW)
HP901	1-543-506-11	HEAD, MAGNETIC (PLAYBACK)
IC1	1-807-502-11	IC STK3400
IC2	8-759-820-86	IC LM7000
IC101	8-759-206-48	IC TA7705F
IC102	8-759-106-22	IC UPD4052BG
IC103	8-752-031-27	IC CXA1097Q
IC104	8-759-820-15	IC LC7537AN
IC105	8-759-109-70	IC UPC4560G2
IC106	8-759-109-70	IC UPC4560G2
IC107	8-759-109-70	IC UPC4560G2
IC108	8-759-109-70	IC UPC4560G2
IC109	8-759-604-56	IC M5228FP
IC110	8-759-631-00	IC M5280FP
IC111	8-759-106-23	IC UPD4066BG
IC112	8-759-631-00	IC M5280FP
IC301	8-759-142-08	IC UPD75108G-642-1B
IC302	8-759-631-01	IC M54644BL
IC303	8-759-200-84	IC TC4081BF
IC304	8-759-820-87	IC LA2000
IC501	8-759-230-25	IC TA8210H
IC801	8-759-971-69	(7152)...IC TDA1579
IC802	8-759-145-58	(7152)...IC UPC4558C
L1	1-410-330-11	INDUCTOR 22UH
L101	1-235-186-00	ENCAPSULATED COMPONENT
L201	1-235-186-00	ENCAPSULATED COMPONENT
L301	1-410-330-11	INDUCTOR 22UH
L302	1-408-111-00	INDUCTOR 3.3UH
L303	1-410-330-11	INDUCTOR 22UH
L551	1-421-369-00	COIL, CHOKE
L801	1-424-036-11	(7152)...COIL (FILTER)

Ref.No.	Part No.	Description
M901	A-3239-951-A	MOTOR SUB ASSY, CAPSTAN
M902	A-3239-956-A	MOTOR SUB ASSY, L
PH11	8-719-939-11	GP2S09-B
PH12	8-719-939-11	GP2S09-B
PM901	1-454-461-11	SOLENOID, PLUNGER
Q1	8-729-100-66	TRANSISTOR 2SC1623
Q2	8-729-100-66	TRANSISTOR 2SC1623
Q3	8-729-100-66	TRANSISTOR 2SC1623
Q4	8-729-100-66	TRANSISTOR 2SC1623
Q5	8-729-100-66	TRANSISTOR 2SC1623
Q6	8-729-901-01	TRANSISTOR DTC144EK
Q7	8-729-901-04	TRANSISTOR DTA114EK
Q8	8-729-807-11	TRANSISTOR 2SD1802
Q9	8-729-804-42	TRANSISTOR 2SB1122-T
Q10	8-729-804-42	TRANSISTOR 2SB1122-T
Q11	8-729-900-53	TRANSISTOR DTC114EK
Q12	8-729-901-01	(7151)...TRANSISTOR DTC144EK
Q13	8-729-901-01	TRANSISTOR DTC144EK
Q102	8-729-920-01	TRANSISTOR DTC314TKH04
Q202	8-729-920-01	TRANSISTOR DTC314TKH04
Q301	8-729-100-66	TRANSISTOR 2SC1623
Q302	8-729-100-66	TRANSISTOR 2SC1623
Q303	8-729-100-66	TRANSISTOR 2SC1623
Q304	8-729-900-53	TRANSISTOR DTC114EK
Q305	8-729-804-42	TRANSISTOR 2SB1122-T
Q306	8-729-901-01	TRANSISTOR DTC144EK
Q307	8-729-901-04	TRANSISTOR DTA114EK
Q308	8-729-106-64	TRANSISTOR 2SD1615
Q309	8-729-900-53	TRANSISTOR DTC114EK
Q310	8-729-100-66	TRANSISTOR 2SC1623
Q311	8-729-900-53	TRANSISTOR DTC114EK
Q312	8-729-100-66	TRANSISTOR 2SC1623
Q313	8-729-100-66	TRANSISTOR 2SC1623
Q314	8-729-807-11	TRANSISTOR 2SD1802
Q315	8-729-900-53	(7152)...TRANSISTOR DTC114EK
Q316	8-729-900-53	TRANSISTOR DTC114EK
Q317	8-729-804-42	TRANSISTOR 2SB1122-T
Q318	8-729-100-66	TRANSISTOR 2SC1623
Q319	8-729-100-66	TRANSISTOR 2SC1623
Q320	8-729-807-11	TRANSISTOR 2SD1802
Q321	8-729-106-64	TRANSISTOR 2SD1615
Q322	8-729-807-11	TRANSISTOR 2SD1802
Q323	8-729-807-11	TRANSISTOR 2SD1802
Q324	8-729-900-53	TRANSISTOR DTC114EK
Q325	8-729-900-53	TRANSISTOR DTC114EK
Q326	8-729-106-64	TRANSISTOR 2SD1615
Q327	8-729-901-01	TRANSISTOR DTC144EK
Q328	8-729-901-01	TRANSISTOR DTC144EK
Q501	8-729-905-55	TRANSISTOR DTC314TS
Q601	8-729-905-55	TRANSISTOR DTC314TS
R1	1-249-417-11	CARBON MELF 1K 5% 1/5W
R2	1-249-419-11	CARBON MELF 1.5K 5% 1/5W
R3	1-249-417-11	CARBON MELF 1K 5% 1/5W
R4	1-215-452-00	CARBON MELF 20K 5% 1/5W
R5	1-249-425-11	CARBON MELF 4.7K 5% 1/5W
R6	1-249-393-11	CARBON MELF 10 5% 1/5W

Ref.No.	Part No.	Description
R7	1-249-422-11	CARBON MELF 2.7K 5% 1/5W
R8	1-249-426-11	CARBON MELF 5.6K 5% 1/5W
R9	1-249-426-11	CARBON MELF 5.6K 5% 1/5W
R10	1-249-437-11	CARBON MELF 47K 5% 1/5W
R11	1-249-438-11	CARBON MELF 56K 5% 1/5W
R12	1-249-427-11	(7152)...CARBON MELF 6.8K 5% 1/5W
R12	1-249-423-11	(7150/7151) ...CARBON MELF 3.3K 5% 1/5W
R13	1-249-427-11	(7152)...CARBON MELF 6.8K 5% 1/5W
R13	1-249-423-11	(7150/7151) ...CARBON MELF 3.3K 5% 1/5W
R14	1-249-434-11	CARBON MELF 27K 5% 1/5W
R15	1-249-434-11	CARBON MELF 27K 5% 1/5W
R16	1-215-462-00	CARBON MELF 51K 5% 1/5W
R17	1-215-462-00	CARBON MELF 51K 5% 1/5W
R18	1-215-493-00	CARBON MELF 1M 5% 1/5W
R19	1-249-425-11	CARBON MELF 4.7K 5% 1/5W
R20	1-249-419-11	CARBON MELF 1.5K 5% 1/5W
R21	1-249-417-11	CARBON MELF 1K 5% 1/5W
R22	1-249-423-11	CARBON MELF 3.3K 5% 1/5W
R23	1-249-429-11	CARBON MELF 10K 5% 1/5W
R24	1-249-417-11	CARBON MELF 1K 5% 1/5W
R25	1-249-424-11	CARBON MELF 3.9K 5% 1/5W
R26	1-249-417-11	CARBON MELF 1K 5% 1/5W
R27	1-249-423-11	CARBON MELF 3.3K 5% 1/5W
R28	1-249-425-11	CARBON MELF 4.7K 5% 1/5W
R29	1-249-422-11	CARBON MELF 2.7K 5% 1/5W
R30	1-249-417-11	CARBON MELF 1K 5% 1/5W
R31	1-249-425-11	CARBON MELF 4.7K 5% 1/5W
R32	1-249-425-11	CARBON MELF 4.7K 5% 1/5W
R33	1-249-425-11	CARBON MELF 4.7K 5% 1/5W
R34	1-249-426-11	CARBON MELF 5.6K 5% 1/5W
R35	1-249-434-11	CARBON MELF 27K 5% 1/5W
R36	1-249-435-11	CARBON MELF 33K 5% 1/5W
R37	1-249-429-11	CARBON MELF 10K 5% 1/5W
R38	1-249-441-11	CARBON MELF 100K 5% 1/5W
R39	1-249-438-11	CARBON MELF 56K 5% 1/5W
R101	1-216-184-00	METAL GLAZE 270 5% 1/8W
R102	1-216-258-00	METAL GLAZE 330K 5% 1/8W
R103	1-216-226-00	METAL GLAZE 15K 5% 1/8W
R104	1-249-431-11	CARBON MELF 15K 5% 1/5W
R107	1-249-429-11	CARBON MELF 10K 5% 1/5W
R109	1-215-433-00	METAL 3.3K 1% 1/6W
R110	1-215-433-00	METAL 3.3K 1% 1/6W
R111	1-215-412-00	CARBON MELF 430 5% 1/5W
R112	1-249-427-11	CARBON MELF 6.8K 5% 1/5W
R114	1-249-417-11	CARBON MELF 1K 5% 1/5W
R115	1-215-473-00	CARBON MELF 150K 5% 1/5W
R116	1-249-437-11	CARBON MELF 47K 5% 1/5W
R117	1-216-270-00	METAL GLAZE 1M 5% 1/8W
R118	1-216-222-00	METAL GLAZE 10K 5% 1/8W
R119	1-249-431-11	CARBON MELF 15K 5% 1/5W
R120	1-249-423-11	CARBON MELF 3.3K 5% 1/5W
R121	1-215-493-00	CARBON MELF 1M 5% 1/5W
R122	1-215-493-00	CARBON MELF 1M 5% 1/5W
R123	1-215-493-00	CARBON MELF 1M 5% 1/5W

Ref.No.	Part No.	Description			
R124	1-249-417-11	CARBON MELF	1K	5%	1/5W
R125	1-216-248-00	METAL GLAZE	120K	5%	1/8W
R126	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R127	1-216-248-00	METAL GLAZE	120K	5%	1/8W
R128	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R129	1-249-433-11	CARBON MELF	22K	5%	1/5W
R130	1-249-431-11	CARBON MELF	15K	5%	1/5W
R131	1-249-433-11	CARBON MELF	22K	5%	1/5W
R132	1-249-431-11	CARBON MELF	15K	5%	1/5W
R133	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R134	1-249-429-11	CARBON MELF	10K	5%	1/5W
R135	1-249-433-11	CARBON MELF	22K	5%	1/5W
R136	1-249-431-11	CARBON MELF	15K	5%	1/5W
R137	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R138	1-249-433-11	CARBON MELF	22K	5%	1/5W
R139	1-249-035-00	CARBON MELF	680	5%	1/5W
R140	1-249-038-00	CARBON MELF	1.2K	5%	1/5W
R201	1-216-184-00	METAL GLAZE	270	5%	1/8W
R202	1-216-258-00	METAL GLAZE	330K	5%	1/8W
R203	1-216-226-00	METAL GLAZE	15K	5%	1/8W
R204	1-249-431-11	CARBON MELF	15K	5%	1/5W
R207	1-249-429-11	CARBON MELF	10K	5%	1/5W
R209	1-215-433-00	METAL	3.3K	1%	1/6W
R210	1-215-433-00	METAL	3.3K	1%	1/6W
R211	1-215-412-00	CARBON MELF	430	5%	1/5W
R212	1-249-427-11	CARBON MELF	6.8K	5%	1/5W
R214	1-249-417-11	CARBON MELF	1K	5%	1/5W
R215	1-215-473-00	CARBON MELF	150K	5%	1/5W
R216	1-249-437-11	CARBON MELF	47K	5%	1/5W
R217	1-216-270-00	METAL GLAZE	1M	5%	1/8W
R218	1-216-222-00	METAL GLAZE	10K	5%	1/8W
R219	1-249-431-11	CARBON MELF	15K	5%	1/5W
R220	1-249-423-11	CARBON MELF	3.3K	5%	1/5W
R221	1-215-493-00	CARBON MELF	1M	5%	1/5W
R222	1-215-493-00	CARBON MELF	1M	5%	1/5W
R223	1-215-493-00	CARBON MELF	1M	5%	1/5W
R224	1-249-417-11	CARBON MELF	1K	5%	1/5W
R225	1-216-248-00	METAL GLAZE	120K	5%	1/8W
R226	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R227	1-216-248-00	METAL GLAZE	120K	5%	1/8W
R228	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R229	1-249-433-11	CARBON MELF	22K	5%	1/5W
R230	1-249-431-11	CARBON MELF	15K	5%	1/5W
R231	1-249-433-11	CARBON MELF	22K	5%	1/5W
R232	1-249-431-11	CARBON MELF	15K	5%	1/5W
R233	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R234	1-249-429-11	CARBON MELF	10K	5%	1/5W
R235	1-249-433-11	CARBON MELF	22K	5%	1/5W
R236	1-249-431-11	CARBON MELF	15K	5%	1/5W
R237	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R238	1-249-433-11	CARBON MELF	22K	5%	1/5W
R239	1-249-035-00	CARBON MELF	680	5%	1/5W
R240	1-249-038-00	CARBON MELF	1.2K	5%	1/5W
R301	1-249-437-11	CARBON MELF	47K	5%	1/5W
R302	1-249-437-11	CARBON MELF	47K	5%	1/5W
R303	1-216-238-00	METAL GLAZE	47K	5%	1/8W
R304	1-249-441-11	CARBON MELF	100K	5%	1/5W

Ref.No.	Part No.	Description			
R305	1-249-441-11	CARBON MELF	100K	5%	1/5W
R306	1-249-441-11	CARBON MELF	100K	5%	1/5W
R307	1-215-469-00	METAL	100K	1%	1/6W
R308	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R309	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R310	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R311	1-249-405-11	CARBON MELF	100	5%	1/5W
R312	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R313	1-249-429-11	CARBON MELF	10K	5%	1/5W
R314	1-249-413-11	CARBON MELF	470	5%	1/5W
R315	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R316	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R317	1-249-393-11	CARBON MELF	10	5%	1/5W
R318	1-249-429-11	CARBON MELF	10K	5%	1/5W
R319	1-249-429-11	CARBON MELF	10K	5%	1/5W
R320	1-249-427-11	CARBON MELF	6.8K	5%	1/5W
R321	1-249-427-11	CARBON MELF	6.8K	5%	1/5W
R322	1-215-473-00	CARBON MELF	150K	5%	1/5W
R323	1-249-405-11	CARBON MELF	100	5%	1/5W
R324	1-249-417-11	CARBON MELF	1K	5%	1/5W
R325	1-249-417-11	CARBON MELF	1K	5%	1/5W
R326	1-249-429-11	CARBON MELF	10K	5%	1/5W
R327	1-249-393-11	CARBON MELF	10	5%	1/5W
R328	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R329	1-249-429-11	CARBON MELF	10K	5%	1/5W
R330	1-216-222-00	METAL GLAZE	10K	5%	1/8W
R331	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R332	1-249-435-11	CARBON MELF	33K	5%	1/5W
R333	1-249-435-11	CARBON MELF	33K	5%	1/5W
R334	1-216-234-00	METAL GLAZE	33K	5%	1/8W
R335	1-216-234-00	METAL GLAZE	33K	5%	1/8W
R336	1-216-234-00	METAL GLAZE	33K	5%	1/8W
R337	1-216-234-00	METAL GLAZE	33K	5%	1/8W
R338	1-249-435-11	CARBON MELF	33K	5%	1/5W
R339	1-249-435-11	CARBON MELF	33K	5%	1/5W
R340	1-249-435-11	CARBON MELF	33K	5%	1/5W
R341	1-249-435-11	CARBON MELF	33K	5%	1/5W
R342	1-216-234-00	METAL GLAZE	33K	5%	1/8W
R343	1-216-234-00	METAL GLAZE	33K	5%	1/8W
R344	1-216-234-00	METAL GLAZE	33K	5%	1/8W
R345	1-216-234-00	METAL GLAZE	33K	5%	1/8W
R346	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R347	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R348	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R349	1-249-411-11	CARBON MELF	330	5%	1/5W
R350	1-247-809-00	CARBON MELF	120	5%	1/5W
R351	1-249-020-00	CARBON MELF	39	5%	1/5W
R352	1-249-436-00	CARBON MELF	39K	5%	1/5W
R353	1-249-436-00	CARBON MELF	39K	5%	1/5W
R354	1-249-430-11	CARBON MELF	12K	5%	1/5W
R356	1-249-451-11	CARBON	2.2	5%	1/4W
R357	1-249-429-11	CARBON MELF	10K	5%	1/5W
R358	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R359	1-249-429-11	CARBON MELF	10K	5%	1/5W
R360	1-249-429-11	CARBON MELF	10K	5%	1/5W
R361	1-249-429-11	CARBON MELF	10K	5%	1/5W
R362	1-249-425-11	CARBON MELF	4.7K	5%	1/5W

Ref.No.	Part No.	Description			
R363	1-249-429-11	CARBON MELF	10K	5%	1/5W
R364	1-249-416-11	CARBON MELF	820	5%	1/5W
R365	1-249-417-11	CARBON MELF	1K	5%	1/5W
R367	1-249-416-11	CARBON MELF	820	5%	1/5W
R368	1-249-416-11	CARBON MELF	820	5%	1/5W
R369	1-249-417-11	CARBON MELF	1K	5%	1/5W
R370	1-249-423-11	CARBON MELF	3.3K	5%	1/5W
R371	1-249-429-11	CARBON MELF	10K	5%	1/5W
R372	1-249-429-11	CARBON MELF	10K	5%	1/5W
R373	1-249-424-11	CARBON MELF	3.9K	5%	1/5W
R374	1-249-423-11	CARBON MELF	3.3K	5%	1/5W
R375	1-249-429-11	CARBON MELF	10K	5%	1/5W
R376	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R377	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R378	1-249-421-11	(7152)...CARBON MELF	2.2K	5%	1/5W
R379	1-249-421-11	(7152)...CARBON MELF	2.2K	5%	1/5W
R380	1-249-413-11	CARBON MELF	470	5%	1/5W
R381	1-249-409-11	CARBON MELF	220	5%	1/5W
R382	1-249-429-11	CARBON MELF	10K	5%	1/5W
R384	1-249-441-11	CARBON MELF	100K	5%	1/5W
R385	1-215-477-00	CARBON MELF	220K	5%	1/5W
R386	1-249-441-11	CARBON MELF	100K	5%	1/5W
R387	1-249-433-11	CARBON MELF	22K	5%	1/5W
R388	1-249-438-11	CARBON MELF	56K	5%	1/5W
R389	1-215-477-00	CARBON MELF	220K	5%	1/5W
R390	1-249-429-11	CARBON MELF	10K	5%	1/5W
R391	1-249-429-11	CARBON MELF	10K	5%	1/5W
R392	1-215-485-00	CARBON MELF	470K	5%	1/5W
R393	1-249-413-11	CARBON MELF	470	5%	1/5W
R394	1-216-222-00	METAL GLAZE	10K	5%	1/8W
R395	1-216-222-00	METAL GLAZE	10K	5%	1/8W
R396	1-249-419-11	CARBON MELF	1.5K	5%	1/5W
R397	1-249-411-11	CARBON MELF	330	5%	1/5W
R399	1-249-413-11	CARBON MELF	470	5%	1/5W
R401	1-249-435-11	CARBON MELF	33K	5%	1/5W
R402	1-249-435-11	CARBON MELF	33K	5%	1/5W
R403	1-249-435-11	CARBON MELF	33K	5%	1/5W
R404	1-249-419-11	CARBON MELF	1.5K	5%	1/5W
R501	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R502	1-249-433-11	CARBON MELF	22K	5%	1/5W
R503	1-249-428-11	CARBON MELF	8.2K	5%	1/5W
R504	1-249-423-11	CARBON MELF	3.3K	5%	1/5W
R505	1-215-487-00	CARBON MELF	560K	5%	1/5W
R506	1-249-413-11	CARBON MELF	470	5%	1/5W
R507	1-249-385-11	CARBON MELF	2.2	5%	1/5W

Ref.No.	Part No.	Description			
R508	1-249-385-11	CARBON MELF	2.2	5%	1/5W
R551	1-249-435-11	CARBON MELF	33K	5%	1/5W
R552	1-249-441-11	CARBON MELF	100K	5%	1/5W
R601	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R602	1-249-433-11	CARBON MELF	22K	5%	1/5W
R603	1-249-428-11	CARBON MELF	8.2K	5%	1/5W
R604	1-249-423-11	CARBON MELF	3.3K	5%	1/5W
R605	1-215-487-00	CARBON MELF	560K	5%	1/5W
R606	1-249-413-11	CARBON MELF	470	5%	1/5W
R607	1-249-385-11	CARBON MELF	2.2	5%	1/5W
R608	1-249-385-11	CARBON MELF	2.2	5%	1/5W
R701	1-249-407-11	CARBON MELF	150	5%	1/5W
R702	1-249-407-11	CARBON MELF	150	5%	1/5W
R703	1-249-407-11	CARBON MELF	150	5%	1/5W
R704	1-249-407-11	CARBON MELF	150	5%	1/5W
R705	1-249-407-11	CARBON MELF	150	5%	1/5W
R706	1-249-407-11	CARBON MELF	150	5%	1/5W
R707	1-249-407-11	CARBON MELF	150	5%	1/5W
R708	1-249-411-11	CARBON MELF	330	5%	1/5W
R709	1-249-411-11	CARBON MELF	330	5%	1/5W
R801	1-249-437-11	(7152)...CARBON MELF	47K	5%	1/5W
R802	1-249-439-11	(7152)...CARBON MELF	68K	5%	1/5W
R803	1-249-425-11	(7152)...CARBON MELF	4.7K	5%	1/5W
R804	1-249-441-11	(7152)...CARBON MELF	100K	5%	1/5W
R805	1-249-413-11	(7152)...CARBON MELF	470	5%	1/5W
R806	1-215-489-00	(7152)...CARBON MELF	680K	5%	1/5W
R807	1-215-477-00	(7152)...CARBON MELF	220K	5%	1/5W
R808	1-249-426-11	(7152)...CARBON MELF	5.6K	5%	1/5W
R809	1-249-423-11	(7152)...CARBON MELF	3.3K	5%	1/5W
R810	1-249-426-11	(7152)...CARBON MELF	5.6K	5%	1/5W
R811	1-249-423-11	(7152)...CARBON MELF	3.3K	5%	1/5W
R812	1-215-488-00	(7152)...CARBON MELF	620K	5%	1/5W
R813	1-249-437-11	(7152)...CARBON MELF	47K	5%	1/5W
R814	1-249-435-11	(7152)...CARBON MELF	33K	5%	1/5W
R815	1-249-430-11	(7152)...CARBON MELF	12K	5%	1/5W
R816	1-215-478-00	(7152)...CARBON MELF	240K	5%	1/5W
R817	1-249-440-11	(7152)...CARBON MELF	82K	5%	1/5W
R818	1-249-437-11	(7152)...CARBON MELF	47K	5%	1/5W
R819	1-249-413-11	(7152)...CARBON MELF	470	5%	1/5W
R820	1-249-437-11	(7152)...CARBON MELF	47K	5%	1/5W
R821	1-249-429-11	(7152)...CARBON MELF	10K	5%	1/5W
R822	1-249-430-11	(7152)...CARBON MELF	12K	5%	1/5W
R851	1-249-417-11	CARBON MELF	1K	5%	1/5W

Ref.No.	Part No.	Description
RV1	1-228-993-00	RES, ADJ, CARBON 4.7K
RV101	1-226-773-11	RES, ADJ, METAL GLAZE 22K
RV102	1-226-773-11	RES, ADJ, METAL GLAZE 22K
RV201	1-226-773-11	RES, ADJ, METAL GLAZE 22K
RV202	1-226-773-11	RES, ADJ, METAL GLAZE 22K
RV801	1-226-769-00	(7152)....RES, ADJ, METAL GLAZE 100
S10	3-344-155-01	CONTACT (WITH SWITCH)
S11	1-571-138-11	SWITCH, PUSH (1 KEY)(TAPE-IN)
S12	1-571-138-11	SWITCH, PUSH (1 KEY)(N/R)
S901	1-570-771-11	SWITCH (POWER)
SW301	1-535-510-00	(7151)...PIN, TEST (LW1/LW2)
SW701	1-554-813-41	SWITCH, KEY BOARD (POWER)
SW702	1-554-813-41	SWITCH, KEY BOARD (LOUD)
SW703	1-554-813-41	SWITCH, KEY BOARD (SELECT)
SW704	1-554-813-41	SWITCH, KEY BOARD (MUTE)
SW705	1-554-813-41	SWITCH, KEY BOARD (LEVEL -)
SW706	1-554-813-41	SWITCH, KEY BOARD (LEVEL +)
SW707	1-554-813-41	SWITCH, KEY BOARD (4/METAL)
SW708	1-554-813-41	SWITCH, KEY BOARD (1/INTRO)
SW709	1-554-813-41	SWITCH, KEY BOARD (2/REPEAT)
SW710	1-554-813-41	SWITCH, KEY BOARD (5/DOLBY)
SW711	1-554-813-41	SWITCH, KEY BOARD (3/BL.SKIP)
SW712	1-554-813-41	SWITCH, KEY BOARD (6)
SW713	1-554-813-41	SWITCH, KEY BOARD (AMS/SEEK -)
SW714	1-554-813-41	SWITCH, KEY BOARD (MANUAL -)
SW715	1-554-813-41	SWITCH, KEY BOARD (DSPL)
SW716	1-554-813-41	SWITCH, KEY BOARD (RESET)
SW717	1-554-813-41	SWITCH, KEY BOARD (LOCAL/MONO)
SW718	1-554-813-41	SWITCH, KEY BOARD (A.MEN/M.SCAN)
SW719	1-554-813-41	SWITCH, KEY BOARD (AMS/SEEK +)
SW720	1-554-813-41	SWITCH, KEY BOARD (MANUAL +)
SW721	1-554-813-41	SWITCH, KEY BOARD (EJECT)
SW722	1-554-813-41	SWITCH, KEY BOARD (PLAY/DIR)
SW723	1-554-813-41	SWITCH, KEY BOARD (FM,FM/AM)
SW724	1-554-813-41	SWITCH, KEY BOARD (AM,MW/LW,SDK)
X1	1-567-250-11	OSCILLATOR, CERAMIC
X2	1-567-848-11	VIBRATOR, CRYSTAL (7.2MHz)
X301	1-567-170-00	OSCILLATOR, CERAMIC (4.19MHz)

ACCESSORY & PACKING MATERIAL

1-532-404-11	(7150:AEP/7151/7152)..FUSE, GLASS TUBE(0.1A)
1-532-422-00	(7150:AEP/7151/7152)..FUSE (6.3A)
1-559-924-11	CORD (WITH CONNECTOR)
3-302-126-01	SCREW, TAPPING (DIA. 5X20)
3-310-655-01	SUPPORT (ND), FITTING
3-323-208-01	BUSHING, RUBBER
3-323-210-01	ADJUSTOR, STUD BOLT
3-336-617-01	BAG, PROTECTION
3-344-536-01	COLLAR (JACK)
3-344-570-01	CUSHION (F & R)
*3-764-869-11	(7152)...INSTRUCTION, DBP CAUTION
3-344-583-01	(7150:US).....INDIVIDUAL CARTON
3-344-584-01	(7150:Canadian,AEP)...INDIVIDUAL CARTON
3-344-586-01	(7151).....INDIVIDUAL CARTON
3-344-587-01	(7152).....INDIVIDUAL CARTON
3-786-073-11	(7150:US,Canadian,AEP/7151) ...MANUAL, INSTRUCTION
3-786-073-41	(7150:AEP).....MANUAL, INSTRUCTION
3-786-073-51	(7152).....MANUAL, INSTRUCTION
3-786-074-11	(7150:US,Canadian,AEP/7151) ..INSTRUCTION, FITTING CONNECTION
3-786-074-41	(7150:AEP)..INSTRUCTION, FITTING CONNECTION
3-786-074-51	(7152).....INSTRUCTION, FITTING CONNECTION
7-682-548-04	SCREW +B 3X8
7-682-579-04	SCREW +P 5X20
7-684-025-04	N 5, TYPE 2

9-953-303-11

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SONY
SERVICE MANUAL

US Model
Canadian Model
XR-7150

AEP Model
XR-7150/7151/7152

CORRECTION-1

File this Correction with the Service Manual.

ELECTRICAL PARTS LIST (Service Manual see page 50.)

INCORRECT		CORRECT →	
Ref. No.	Part No. Description	Part No.	Description
SW301	1-535-510-00 (7151)···PIN, TEST (LW1/LW2)	1-553-510-00	(7151)···SWITCH, SLIDE (LW1/LW2)

9-953-303-91

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